

# **EXHIBIT 1**

149 FERC ¶ 61,255  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Cheryl A. LaFleur, Chairman;  
Philip D. Moeller, Tony Clark,  
and Norman C. Bay.

Columbia Gas Transmission, LLC

Docket No. CP14-17-000

ORDER ISSUING CERTIFICATE AND APPROVING ABANDONMENT

(Issued December 18, 2014)

1. On November 1, 2013, Columbia Gas Transmission, LLC (Columbia) filed an application under section 7(c) of the Natural Gas Act (NGA)<sup>1</sup> and Part 157 of the Commission's regulations<sup>2</sup> for authorization to construct and operate pipeline, compression, and auxiliary facilities in Pennsylvania, New Jersey, New York, and Maryland. Columbia also requests NGA section 7(b) authorization<sup>3</sup> to abandon compression facilities that will be replaced as part of the project. The project, referred to as the East Side Expansion Project, is designed to increase firm pipeline transportation service on the Columbia system by 312,000 dekatherms (Dth) per day.

2. For the reasons discussed below, the Commission grants Columbia's requested certificate and abandonment authorizations, subject to condition.

**I. Background**

3. Columbia,<sup>4</sup> a Delaware limited liability company, is a natural gas company within the meaning of section 2(6) of the NGA.<sup>5</sup> Columbia operates transmission and storage

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<sup>1</sup> 15 U.S.C. § 717f(c) (2012).

<sup>2</sup> 18 C.F.R. pt. 157 (2014).

<sup>3</sup> 15 U.S.C. § 717f(b) (2012).

<sup>4</sup> Columbia is a wholly-owned subsidiary of the Columbia Energy Group, which is a wholly-owned subsidiary of NiSource Inc.

facilities in the States of Delaware, Kentucky, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia.

## II. Proposal

4. Columbia proposes to abandon, construct, and operate facilities to provide an additional 312,000 Dth per day of firm transportation service for five shippers. Specifically, Columbia proposes to:

- Abandon by removal two existing 680 horsepower (hp) reciprocating compressor units and auxiliary equipment at its Milford Compressor Station in Pike County, Pennsylvania, and replace those facilities with two 4,700 hp (ISO) Solar Turbines (Solar) Centaur 40 gas turbine/compressor units and auxiliary equipment. Columbia states that the new facilities will be designed for bi-directional flow capabilities. Columbia also proposes to replace approximately 700 feet of 12-inch-diameter station piping between Line 1278 and Tennessee Gas Pipeline Company, L.L.C.'s system with a 20-inch-diameter pipe to accommodate the additional flow. Following installation of the new turbine/compressor units, the Milford Compressor Station will have a total of 9,400 hp operating at the station.
- Abandon by removal two existing 2,240 hp Solar Saturn units and auxiliary equipment at the existing Easton Compressor Station in Northampton County, Pennsylvania, and replace those facilities with two 10,802 hp (ISO) Solar Taurus 70 turbine/compressor units and auxiliary equipment. Following installation of the new turbine/compressor units, the Easton Compressor Station will have a total of 22,254 hp operating at the station.<sup>6</sup>
- Construct and operate approximately 9.5 miles of 26-inch-diameter coated steel pipeline that will loop the existing 14-inch-diameter Line 1278 between the Eagle and Downingtown Compressor Stations in Chester County, Pennsylvania.
- Construct and operate approximately 9.6 miles of 20-inch-diameter coated steel pipeline that will loop the existing 16-inch-diameter Line 10345 in Gloucester County, New Jersey.

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<sup>5</sup> See 15 U.S.C. § 717a(6) (2012).

<sup>6</sup> Columbia plans to retain the existing Waukesha unit, a 650 hp reciprocating compressor, to continue delivery of interstate natural gas to Transcontinental Gas Pipe Line Company, LLC.

- Install various measurement, station piping, valves, and appurtenant facilities at existing sites located in Orange County, New York, Bucks, and Chester Counties, Pennsylvania, and Harford County, Maryland.

Columbia estimates that the proposed facilities will cost approximately \$268.5 million.<sup>7</sup>

5. Columbia also explains that it has reserved certain existing capacity on its system for the project pursuant to section 4 of the General Terms and Conditions of its FERC Gas Tariff. Specifically, Columbia states that it reserved the following: 24,700 Dth per day from Loudon, Virginia to Hanover, New Jersey; 20,000 Dth per day from Loudon, Virginia, to Columbia's Market Area 25; 16,700 Dth per day from Columbia's connection with Millennium Gas Pipeline Company, L.L.C. (Millennium) at Wagoner near Sparrowbush, New York to Hanover, New Jersey; 20,000 Dth per day from Wagoner to Columbia's Market Area 28; and 7,190 Dth per day from Wagoner to Columbia's Market Area 30.

6. Columbia states that it held a non-binding open season between February 21 and March 13, 2012.<sup>8</sup> Subsequently, Columbia entered into precedent agreements with Cabot Oil & Gas Corporation, New Jersey Natural Gas Company, Southwestern Energy Services Company, South Jersey Gas Company, and South Jersey Resources Group, LLC to provide a total of up to 312,000 Dth per day of firm transportation service under its existing Rate Schedules FTS (Firm Transportation Service) and/or NTS (No Notice Transportation Service). Columbia explains that the executed precedent agreements include a range of primary terms of up to 15 years and that certain agreements are effective on the service commencement date, while other agreements provide for initiation of service at later dates. Columbia states that all the project shippers have elected to receive service at negotiated rates.

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<sup>7</sup> Columbia considered the potential for recovery of waste heat energy at its Easton Compressor Station, which will have a total of 22,254 hp, as discussed in the Interstate Natural Gas Association of America White Paper entitled "Waste Energy Opportunities for Interstate Natural Gas Pipelines" (February 2008). However, Columbia concluded that the anticipated load factor of the compressor units do not make the facilities a viable location for waste heat recovery. Accordingly, Columbia should monitor this station and evaluate the potential for adding waste heat generation to the facilities and post this information to its electronic bulletin board.

<sup>8</sup> Columbia states that it solicited offers from its shippers to permanently relinquish capacity in the open season, but no shippers offered to turn back capacity.

7. Columbia proposes to establish incremental recourse reservation rates for firm service on the proposed facilities under existing Rate Schedules FTS and NTS and to use its existing system-wide ITS rate for interruptible service. Columbia proposes to charge its existing commodity rates under Rate Schedules FTS and NTS and other applicable charges set forth in Columbia's FERC Gas Tariff.

### **III. Notice, Interventions, and Comments**

8. Notice of Columbia's application was published in the *Federal Register* on November 11, 2013 (78 Fed. Reg. 69,845). Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.<sup>9</sup> Several individuals/entities filed unopposed motions to intervene out of time. All have shown an interest in the proceeding and their intervention at this stage of the proceeding will not cause undue delay or unfairly prejudice the rights of any other party. Accordingly, for good cause shown, we will permit the late, unopposed motions to intervene filed before the issuance date of this order.<sup>10</sup>

9. Several parties filed protests or comments raising concerns related to environmental and safety matters including air quality, noise, impact on land values, improper segmentation, and the need for an Environmental Impact Statement (EIS). On December 20, 2013, and May 21, 2014, Columbia filed answers to the protests and comments. The Delaware Riverkeeper Network (Delaware Riverkeeper) filed an answer to Columbia's May 21, 2014 pleading. We will accept the answers herein because they clarify the concerns raised and provide information that has assisted in our decision making.<sup>11</sup> The environmental and safety concerns raised in this proceeding are addressed in the Environmental Assessment (EA), as well as the environmental section of this order.

### **IV. Discussion**

10. Since Columbia seeks to abandon, construct, and operate facilities used to transport natural gas in interstate commerce subject to the jurisdiction of the

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<sup>9</sup> 18 C.F.R. § 385.214 (2014).

<sup>10</sup> 18 C.F.R. § 385.214(d) (2014).

<sup>11</sup> Rule 213(a) of the Commission's Rules of Practice and Procedure does not permit answers to protests or answers to answers unless otherwise ordered by the decisional authority. 18 C.F.R. § 385.213(a) (2014).

Commission, the proposal is subject to the requirements of subsections (b), (c), and (e) of section 7 of the NGA.<sup>12</sup>

**A. Certificate Policy Statement**

11. The Certificate Policy Statement provides guidance for evaluating proposals for certificating new construction.<sup>13</sup> The Certificate Policy Statement establishes criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new storage and pipeline construction.

12. Under this policy, the threshold requirement for pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new pipeline. If residual adverse effects on these interest groups are identified after efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission proceed to complete the environmental analysis where other interests are considered.

13. Columbia's proposal satisfies the threshold requirement that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. As explained below, we are approving Columbia's proposal to recover the fixed costs of the expansion project through new incremental rates under Rate Schedules FTS and NNS, thereby insulating existing customers from any rate increase for

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<sup>12</sup> 15 U.S.C. §§ 717f(b), (c), and (e) (2012).

<sup>13</sup> *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

these costs. In addition, we are approving Columbia's request for a predetermination that it can roll in the costs of the commodity component of Rate Schedules FTS and NTS, as well as other applicable existing charges, because rolling in the costs will result in reduced charges for existing customers.

14. The project will not adversely affect Columbia's existing customers, or other pipelines and their customers. The proposed expansion facilities are designed to provide incremental service without degradation of service to Columbia's existing firm customers. In addition, Columbia's project is designed to meet new demand and there is no evidence that service on other pipelines will be displaced or bypassed. No pipeline companies have objected to the project.

15. Columbia has designed the East Side Expansion Project to minimize adverse impacts on landowners and the communities that might be affected by the project. To the extent practicable, Columbia has maximized its use of existing pipeline and utility corridors to reduce impacts to affected landowners from construction. In addition, the modifications for the new compressors will be confined to property owned by Columbia.

16. Columbia has entered into precedent agreements for the capacity to be created by the project.<sup>14</sup> Columbia's proposal will provide needed transportation infrastructure for the expansion customers. Based on the benefits the project will provide, the minimal adverse impacts on Columbia's existing customers, other pipelines and their captive customers, and landowners and surrounding communities, we find that Columbia's proposed project is consistent with the Certificate Policy Statement and is required by the public convenience and necessity, as conditioned in this order.

## **B. Abandonment**

17. We will approve Columbia's request to abandon by removal all of the facilities associated with the existing Milford Compressor Station and the two existing Solar Saturn units and auxiliary equipment at the existing Easton Compressor Station. These facilities will be replaced with new compressor units and auxiliary equipment in order to accommodate the new expansion volumes while continuing to meet the requirements of Columbia's existing customers. Thus, we find the proposed abandonment is permitted by the public convenience or necessity pursuant to NGA section 7(b).

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<sup>14</sup> Consistent with Commission policy, we will require Columbia to execute firm contracts for the capacity levels and terms of service represented in the signed precedent agreements, prior to commencing construction.

### C. Recourse Rates

18. As stated above, Columbia proposes to establish incremental recourse reservation rates for service under Rate Schedules FTS and NTS. Specifically, Columbia proposes incremental monthly firm recourse reservation rates under Rate Schedule FTS of \$11.287 per Dth and under Rate Schedule NTS of \$12.805 per Dth.<sup>15</sup> The proposed recourse rates are based on a Year 1 cost of service of \$42,257,967<sup>16</sup> and an estimated total capital cost of \$268,495,000 for the project facilities. In developing the proposed cost of service for the expansion facilities, Columbia used its existing transmission depreciation rate of 1.50 percent and pre-tax rate of return of 12.98 percent approved in Docket Nos. RP12-1021-000<sup>17</sup> and RP95-408-000,<sup>18</sup> respectively. Columbia asserts that its proposal to charge incremental reservation rates that are higher than the system recourse rates contained in its tariff is consistent with the no subsidy requirement of the Certificate Policy Statement.<sup>19</sup> Columbia proposes to charge its current system wide ITS rate for interruptible transportation service because the facilities it proposes to construct for the project will be fully integrated with its overall system.

19. Columbia proposes to charge its existing commodity rates under Rate Schedules FTS and NTS, and apply other charges set forth in Columbia's tariff including its existing

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<sup>15</sup> Columbia's proposed monthly NTS reservation rate consists of the proposed incremental FTS rate of \$11.287 per Dth, plus the storage adder of \$1.518 per Dth currently applicable to its generally available system-wide Rate Schedule NTS service.

<sup>16</sup> See Columbia's Application at Exhibit P.

<sup>17</sup> *Columbia Gas Transmission, LLC*, 142 FERC ¶ 61,062 (2013).

<sup>18</sup> *Columbia Gas Transmission Corp.*, 79 FERC ¶ 61,044 (1997).

<sup>19</sup> Effective May 1, 2014, Columbia's monthly system transportation rate for Rate Schedule FTS service is \$5.393 per Dth (consisting of the base FTS reservation rate of \$5.00 per Dth, plus the Capital Cost Recovery Mechanism (CCRM)) and for Rate Schedule NTS service is \$6.911 per Dth (consisting of the base NTS reservation rate of \$6.518 per Dth, plus the CCRM). The CCRM allows Columbia to recover, through an additive capital demand rate, its revenue requirement for capital investments to modernize its system and was approved in an Order Approving Contested Settlement. *Columbia Gas Transmission, LLC*, 142 FERC ¶ 61,062 (2013). Article 7.5 of the Settlement provides that incrementally-priced projects will not be subject to the CCRM, unless and until they are eligible for rolled-in rate treatment.



retainage percentage for the recovery of fuel and lost and unaccounted for gas under its Retainage Adjustment Mechanism (RAM), Transportation Recovery Adjustment (TCRA) for third party transportation costs, Electric Power Cost Adjustment (EPCA) for electric costs, and Operational Transaction Rate Adjustment (OTRA) for certain operational natural gas purchases and sales. Columbia requests a predetermination of rolled-in rate treatment for these cost components asserting that rolled-in treatment of these cost components for the expansion customers will either result in no cost impact or an anticipated net benefit to Columbia's existing customers. Regarding fuel (i.e., RAM), Columbia submitted a study that shows that the operation of the East Side Expansion Project facilities would require approximately 0.72 percent in compressor fuel,<sup>20</sup> as compared to Columbia's current system-wide fuel retention of 1.032 percent. Therefore, Columbia maintains that rolling in the billing determinants in calculating rates associated with fuel used and lost and unaccounted for gas will reduce the overall retainage rate for existing customers. Similarly, Columbia asserts that rolled-in rate treatment of its TCRA, EPCA, and OTRA surcharges is appropriate because, all other things remaining equal, including the increased billing determinants into the calculation of each of these cost adjustment mechanism, will have the effect of decreasing rates for Columbia's customers.

20. The Commission has reviewed the proposed cost-of-service and initial recourse rates and finds the proposed cost-of-service and proposed recourse rates filed in the application reasonable. We also will approve Columbia's request for a presumption of rolled-in rate treatment for the costs associated with the commodity component of the FTS and NTS rates and for the TCRA, EPCA, RAM and OTRA charges, absent a significant change of circumstances. Columbia has adequately demonstrated that such treatment will result in rate benefits to its existing customers.

21. The Commission will require Columbia to file actual tariff sheets in accordance with section 154.207 of the Commission's regulations no less than 30 days, or more than 60 days, prior to commencing service. In addition, because we are approving incremental rates for the reservation charges under Rate Schedules FTS and NTS, Columbia will be required to maintain its accounts for these facilities in accordance with section 154.309 of the Commission's regulations, which applies to incremental expansions. This information must be in sufficient detail so that the data can be identified in

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<sup>20</sup> See Columbia's April 18, 2014 Response to Commission Staff data requests, Question No. 2.

Statements G, I, and J in any future NGA section 4 or 5 rate case and provided consistent with Order No. 710 on incremental facilities.<sup>21</sup>

#### **D. Negotiated Rate Agreements**

22. Columbia is proposing to enter into negotiated rate agreements under Rate Schedules FTS and NTS with the expansion shippers. Columbia must file either its negotiated rate agreements or tariff records describing the negotiated rate associated with these services in accordance with the Alternative Rate Policy Statement,<sup>22</sup> the Commission's negotiated rate policies,<sup>23</sup> and the General Terms and Conditions of its tariff<sup>24</sup> at least 30 days, but not more than 60 days, before the proposed effective date for such rates.

23. Consistent with the Commission's negotiated rate policies, if Columbia files a tariff sheet reflecting the terms of an agreement, it must include a statement that the agreement conforms in all material respects with its *pro forma* service agreement.<sup>25</sup> On the other hand, if any of the service agreements contain non-conforming provisions, Columbia is required to file those service agreements and identify and disclose all non-conforming provisions or agreements affecting the substantive rights of the parties under

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<sup>21</sup> *Revisions to Forms, Statements, and Reporting Requirements for Natural Gas Pipelines*, Order No. 710, FERC Stats. & Regs. ¶ 31,267, at P 23 (2008).

<sup>22</sup> *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines; Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, 74 FERC ¶ 61,076, *clarification granted*, 74 FERC ¶ 61,194 (1996).

<sup>23</sup> *Natural Gas Pipeline Negotiated Rate Policies and Practices; Modification of Negotiated Rate Policy*, 104 FERC ¶ 61,134 (2003), *order on reh'g and clarification*, 114 FERC ¶ 61,042, *reh'g dismissed and clarification denied*, 114 FERC ¶ 61,304 (2006).

<sup>24</sup> *See* Columbia Gas Transmission, LLC, FERC NGA Gas Tariff, Baseline Tariffs, Gen. Terms & Conditions, Negotiated Rates, 0.0.0.

<sup>25</sup> A material deviation is any provision in a service agreement that (1) goes beyond filling in the blank spaces with the appropriate information allowed by the tariff, and (2) affects the substantive rights of the parties. *See, e.g., Columbia Gas Transmission Corp.*, 97 FERC ¶ 61,221, at 62,002 (2001).

the tariff or service agreement.<sup>26</sup> This required disclosure includes any transportation provision or agreement detailed in a precedent agreement that survives the execution of the service agreement.

**E. Environmental Analysis**

24. On March 8, 2013, the Commission staff began its environmental review for the East Side Expansion Project after granting Columbia's request to use the Commission's pre-filing process and assigned Docket No. PF13-7-000. As part of the pre-filing review, staff participated in open houses sponsored by Columbia in Exton, Pennsylvania on April 8, 2013; Swedesboro, New Jersey on April 9 and September 11, 2013; Milford, Pennsylvania on June 17, 2013; and in Easton, Pennsylvania on August 1, 2013, to explain our environmental review process to interested stakeholders.

25. On June 6, 2013, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment for the Planned East Side Expansion Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* (NOI). The NOI was published in the Federal Register<sup>27</sup> and mailed to federal, state, and local government representatives and agencies; elected officials; environmental and public interest groups; potentially affected landowners; other interested individuals; and newspapers and libraries in the project area. The Commission received 204 comment letters in response to the NOI.

26. On June 18 and 19, 2013, the Commission staff conducted public scoping meetings in West Chester, Pennsylvania and Swedesboro, New Jersey to provide the public with an opportunity to learn more about the project and comment on environmental issues that should be addressed in the Environmental Assessment (EA). Based on stakeholder concerns raised at these meetings, letters submitted to the Commission, and staff's requests for additional environmental information, Columbia developed several route variations and alternatives. The Commission issued a *Notice of Additional Public Scoping Meetings for the Planned East Side Expansion Project and Request for Comments on Environmental Issues* on October 1, 2013, that was published

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<sup>26</sup> 18 C.F.R. § 154.112 (2014). *See also Natural Gas Pipelines Negotiated Rate Policies and Practices; Modification of Negotiated Rate Policy*, 104 FERC ¶ 61,134 at PP 31-34 (clarifying the Commission's filing requirements for negotiated rates, particularly where the negotiated agreement contained material deviations from the form of service agreement).

<sup>27</sup> 78 Fed. Reg. 35627 (June 13, 2013).

in the Federal Register<sup>28</sup> and mailed to landowners and interested parties potentially affected by the alternative routes under consideration. Two additional public scoping meetings were held on October 15 and 16, 2013, in Swedesboro, New Jersey and Exton, Pennsylvania, respectively, to provide the public an additional opportunity to comment on the alternative routes. In total, 60 individuals provided verbal comments on the project at the Commission's four scoping meetings.

27. The primary issues raised during the scoping process included the purpose and need for the project, future plans and concerns regarding segmentation of Columbia's upgrade projects, requests for an EIS rather than an EA, potential effects associated with natural gas development activities, safety, traffic congestion, air quality, water quality, potential effects to agricultural lands, potential conflicts with proposed future development, cumulative impacts, and alternatives. Based on public comments and environmental analyses conducted during the prefilings process, Columbia adopted several of the route variations.

28. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA), Commission staff prepared an EA for Columbia's proposal. The U.S. Army Corps of Engineers (COE) participated in the preparation of the EA as a cooperating agency. The EA addresses geology and soils, water resources, wetlands, fisheries, vegetation, wildlife, threatened and endangered species, land use, cultural resources, air quality and noise, reliability and safety, cumulative impacts, and alternatives. All substantive environmental comments raised during the scoping process were addressed in the EA.

29. On August 29, 2014, the EA was issued for a 30-day comment period, mailed to all stakeholders on the Commission staff's environmental mailing list, and placed into the public record. The Commission received comments on the EA from three local agencies, two state agencies, one federal agency, four organizations, and approximately 200 individual stakeholders. More than 150 of these letters were in a form letter format in opposition to the Milford Compressor Station. Substantive comments that require clarification to issues addressed in the EA are discussed in this order.

### **1. The EA Process and Procedural Concerns**

30. Several commentors, including the Allegheny Defense Project, Delaware Riverkeeper, Clean Air Council, and Energy Justice Network (Energy Justice), request the Commission prepare an EIS rather than an EA. As addressed in section 1.3 of the EA, one of the purposes of the EA is to assist agencies in determining whether to prepare

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<sup>28</sup> 78 Fed. Reg. 61955 (Oct. 8, 2013).

an EIS or to make a finding of no significant impact.<sup>29</sup> The EA concludes, and we agree, that the East Side Expansion Project would not have a significant impact on the quality of the human environment.<sup>30</sup> Therefore, an EIS is not required.

31. The Chester County Planning Commission (CCPC), Energy Justice, State of New Jersey State Agriculture Development Committee (SADC), and numerous individuals express concern regarding certain construction and mitigation plans that are under development [fugitive dust, polychlorinated biphenyls (PCBs), and asbestos handling plans; and Columbia's Spill Prevention, Control, and Countermeasure (SPCC) Plan], and state and local permits that have not yet been issued. Commentors request the pending information should be included as an addendum to the EA and the Commission extend the EA comment period for an additional 45 days so sufficient time is afforded to review this information.

32. Pursuant to Environmental Conditions 22 and 25 of this order, Columbia will file plans for the control and handling of fugitive dust, PCB, and asbestos containing materials for the Commission staff review and approval prior to construction. The plans will be available for public review in the docket for this proceeding, as requested by the commentors. Therefore, we conclude no extension of the EA comment period is required to afford the public an opportunity to comment on these plans. Regarding the SPCC Plan, Columbia filed this plan with its application on November 1, 2013. The SPCC plan is available for review in this docket and the EA finds the plan acceptable. We concur.

33. Regarding pending state and local permits, table 1.8-1 of the EA identifies applicable permits for Columbia's project, and the status of each approval at the time of the EA's issuance. The Commission staff does not wait for the issuance of state and local permits to assess project impacts in order to make conclusions under NEPA. The issuance of state and local permits and approvals proceeds on a parallel but separate review process under the purview of the respective agencies with jurisdiction. It is not practical for the Commission to withhold its analysis until all state and local permits are issued. In spite of the best efforts of those involved, it may be impossible for an applicant to obtain all approvals necessary to construct and operate a project in advance

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<sup>29</sup> 40 C.F.R. § 1508.9(a)(1) (2014).

<sup>30</sup> CEQ regulations state that, where an EA concludes a finding of no significant impact, an agency may proceed without preparing an EIS. *See* 40 C.F.R. §§ 1501.4(e), 1508.13 (2014).

of the Commission's EA without unduly delaying the project.<sup>31</sup> However, the Commission will not authorize construction of the project until all federal authorizations are received, as required by Environmental Condition 8 of this order. This includes any federal authorizations that are delegated to state agencies, such as air quality permits under the Clean Air Act, section 401 Clean Water Act permits, and National Historic Preservation Act section 106 consultations with the State Historic Preservation Offices. The Commission takes this approach in order to make timely decisions on matters related to its NGA jurisdiction that will inform project sponsors and other permitting agencies, as well as the public. This approach is consistent with the Commission's broad conditioning powers under section 7 of the NGA. Thus, an addendum to the EA and comment period extension is not necessary.

34. CCPC requests compliance with the Chester County County-wide Act 167 Stormwater Management Plan (Act 167 Plan) that was adopted by the Chester County Board of Commissioners and approved by the Pennsylvania Department of Environmental Protection (PADEP) in July 2013. In a letter to CCPC filed with the Commission on October 22, 2014, Columbia verified that the project is designed to be consistent with the Act 167 Plan. Columbia states that an Act 167 Plan Verification Report, signed and sealed by a Professional Engineer, was submitted to the Chester County Conservation District in June 2014, demonstrating compliance with the Act 167 Plan, in accordance with the PADEP Notice of Intent for Coverage Under the Erosion and Sediment Control General Permit for Earth Disturbance Associated with Oil and Gas Exploration, Production, Processing or Treatment Operations or Transmission Facilities (ESCGP-2). It is at the discretion of the Chester County Conservation District to determine whether Columbia has complied with the applicable requirements of the ESCGP-2 permit program.

35. Further, CCPC requests that the Commission require Columbia to meet the recommended environmental conditions contained in the EA. This order requires that Columbia comply with the recommendations in the EA, as modified herein.

36. Delaware Riverkeeper comments that the Commission did not formally request the cooperation of the Delaware River Basin Commission during the EA preparation, which is qualified under "jurisdiction by law" and "special expertise." We disagree. The Commission staff sent the Delaware River Basin Commission a copy of the NOI on June 6, 2013, and the supplemental NOI on October 1, 2013. The NOIs requested the formal cooperation of agencies with jurisdiction by law and/or special expertise with

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<sup>31</sup> See, e.g., *Crown Landing LLC*, 117 FERC ¶ 61,209, at P 26 (2006); *Millennium Pipeline Co., L.P.*, 100 FERC ¶ 61,277, at PP 225-231 (2002).

respect to environmental issues. The staff received no response from the Delaware River Basin Commission. Additionally, Columbia's project does not meet the Delaware River Basin Commission's applicable threshold that requires it to consult because water withdrawals from either ground water or running streams would not exceed the threshold of a gross withdrawal of more than 100,000 gallons of water within a 30-day period.<sup>32</sup>

## 2. Segmentation

37. Delaware Riverkeeper and Energy Justice assert that the Commission improperly segmented its environmental review of the East Side Expansion Project from other projects. In support, Delaware Riverkeeper cites Columbia's application and Resource Report 10 which sets forth three options for increasing natural gas capacity along Line 1278 by looping different segments of the line and asserts "[a] review of these alternatives suggests that the proposed Project is simply the *first phase* in upgrading the entire 100 mile pipeline corridor between the Wagoner Interconnect and the Downingtown Compressor Station."<sup>33</sup>

38. Delaware Riverkeeper also maintains that the additional upgrades will be necessary due to unsafe gas velocities on other portions of this line resulting from the proposed looping project. It states that Columbia has confirmed that the project will result in gas flow velocities beyond its recommended 50 feet per second (ft/sec) threshold in a 7.7 mile portion of Line 1278. It claims that the EA does not adequately support the conclusion that gas velocities resulting from the project on this segment will be well below the estimated erosional velocity for the pipeline segment and therefore can be safely operated.

39. Under these circumstances, Delaware Riverkeeper claims that Columbia must initiate a comprehensive corridor-wide review to examine the impact of upgrading the entire Columbia 1278 line consistent with the holding in *Delaware Riverkeeper Network v. FERC*.<sup>34</sup> It asserts that the proposed project here presents the same factual circumstances, where a single pipeline corridor is being upgraded piecemeal to avoid the proper environmental review. Delaware Riverkeeper argues that the Commission fails to

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<sup>32</sup> See Delaware River Basin Commission, *Administrative Manual: Rules of Practice and Procedure* § 2.3.4.A (revised May 31, 2002), [http://www.state.nj.us/drbc/library/documents/admin\\_manual.pdf](http://www.state.nj.us/drbc/library/documents/admin_manual.pdf).

<sup>33</sup> Delaware Riverkeeper Comments at 7.

<sup>34</sup> 753 F.3d 1304 (D.C. Cir. 2014).

satisfy factors articulated in *Taxpayer Watchdog, Inc. v Stanley*<sup>35</sup> used by courts to determine whether a project is unlawfully segmented, namely, whether the project has substantial independent utility, has logical termini, and does not foreclose the opportunity to consider alternatives.

40. Energy Justice asserts that we are segmenting the environmental review of Columbia's proposed project from past projects within the Delaware River Basin. It references two projects on Columbia's system, a 2010 upgrade in Pike County, Pennsylvania, and a 2011 upgrade from Pike County, Pennsylvania to Minisink, New York; and two projects on Millennium's system, the 2012 Minisink Compressor Station Project, and the 2013 Hancock Compressor Station Project. In support, it states that these projects are interrelated within the Upper Delaware River Basin.

41. The Council on Environmental Quality's (CEQ) regulations require that the scope of an environmental review under NEPA include "connected," "cumulative," and "similar" actions.<sup>36</sup> An agency may not impermissibly "segment" its NEPA review by dividing such actions into separate projects and thereby failing to address the true scope and impact of the activities that should be under consideration.

42. Actions are "connected" if they: "[a]utomatically trigger other actions which may require environmental impact statements"; "[c]annot or will not proceed unless other actions are taken previously or simultaneously"; or "[a]re interdependent parts of a larger action and depend on the larger action for their justification."<sup>37</sup> "Cumulative actions" are those "which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement."<sup>38</sup> "Similar actions" are those "which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography."<sup>39</sup> The courts have held that improper segmentation is usually concerned with projects that have reached the

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<sup>35</sup> 819 F.2d 294, 298 (D.C. Cir. 1987).

<sup>36</sup> 40 C.F.R. § 1508.25 (2014).

<sup>37</sup> 40 C.F.R. § 1508.25(a)(1) (2014).

<sup>38</sup> 40 C.F.R. § 1508.25(a)(2) (2014).

<sup>39</sup> 40 C.F.R. § 1508.25(a)(3) (2014).



proposal stage.<sup>40</sup> Applying these principles here, we find no merit in the commentators' segmentation claims.

43. Delaware Riverkeeper's claim that the information in Resource Report No. 10 shows that Columbia intends to loop other portions of Line 1278 is unavailing. As required by section 380.12(l) of the Commission regulations, Resource Report No. 10 merely describes alternatives to the project that Columbia considered but did not pursue because the costs and/or environmental impacts would have been greater than the alternative proposed. It provides no information concerning Columbia's future plans for further looping of Line 1278.

44. Similarly, Delaware Riverkeeper's claim that the Commission is improperly segmenting the looping of Line 1278 from other projects because once the project is in operation, gas velocities on the unlooped segments along the line will exceed the 50 ft/sec velocity, creating safety issues that require looping other portions of Line 1278 is without support. As explained in the EA and further below, the record demonstrates that Columbia has properly designed its pipeline loops to meet the capacity needs of this project while maintaining flow velocities on its pipeline without exceeding design requirements and calculated erosional velocities on its system. Columbia has confirmed that it has no plans for additional looping of Line 1278 at this time.<sup>41</sup>

45. Thus, there are no other connected, similar, or cumulative actions to consider on Line 1278 in the Commission's environmental review for this project under the CEQ regulations or the factors set forth in *Taxpayers Watchdog, Inc. v. Stanley*. For this reason, this situation is readily distinguishable from *Delaware Riverkeeper Network v. FERC*, that considered four pipeline upgrades on a specific mainline, all of which were either proposed and before the Commission or under construction at the same time, but reviewed separately.

46. We also disagree with Energy Justice's claim that we are improperly segmenting our environmental review with a number of other past projects. We are unable to identify the 2010 upgrade in Pike County, Pennsylvania, the first referenced project on the Columbia system. The second referenced project on the Columbia system appears to be Columbia's Line 1278-Line K Replacement Project in Docket No. CP10-492-000. This project was part of Columbia's Modernization Program, developed to address its aging

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<sup>40</sup> *Reilly v. United States Army Corps of Engineers*, 477 F.3d 225, 236-237 (5th Cir. 2007).

<sup>41</sup> See Columbia October 14, 2014 Answer.

infrastructure, and replaced deteriorated and obsolete facilities.<sup>42</sup> Section 1.3 of the EA discusses Columbia's Modernization Program and concludes that the East Side Expansion Project is independent of planned enhancements to other portions of Columbia's system. We concur.

47. The other two projects that Energy Justice asserts we are unlawfully segmenting from the proposed project are not upgrades on Columbia's system, but on Millennium's system. The Minisink Project involved construction of a compressor station in the Town of Minisink, Orange County, New York, and was approved by the Commission in July 2012.<sup>43</sup> The Hancock Project involved construction of a compressor station in the Town of Hancock, Delaware County, New York, and was approved by the Commission in October 2013.<sup>44</sup> Energy Justice has not provided any evidence that Columbia's proposal is interconnected with these projects on the Millennium system. Rather, the record supports a finding that the East Side Expansion Project is a stand-alone project designed to meet the needs of the five project shippers. Moreover, both of these projects were approved by the Commission before Columbia filed its application for the East Side Expansion Project, and therefore have no temporal nexus to Columbia's project.

### **3. Mapping and Alignment Sheets**

48. The New Jersey SADC, CCPC, and Chester County Water Resources Authority note inconsistencies in figures that were provided in the EA and a lack of detailed drawings regarding steep slope sections, wetland and waterbody crossings, and staging areas. The minor typographical errors identified by the commentors do not alter the EA's analysis or conclusions. Furthermore, the EA is intended as a summary document and as such, does not contain all of the detail that is included in Columbia's application, alignment drawings, maps, and figures. These details are, however, included in the public file for this proceeding. As required by Environmental Condition 4, Columbia must file any revised detailed survey alignment maps, prior to construction. The drawings will be publicly available through the Commission e-library system.

49. The CCPC suggests that the Commission and Columbia should have utilized the Federal Emergency Management Agency (FEMA) 2014 floodmaps, rather than the 2013 floodmaps provided by Columbia in its application. We disagree. The 2013 FEMA

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<sup>42</sup> See *Columbia Gas Transmission, LLC*, 134 FERC ¶ 61,196 (2011).

<sup>43</sup> *Millennium Pipeline Co., L.L.C.*, 140 FERC ¶ 61,045 (2012).

<sup>44</sup> *Millennium Pipeline Co., L.L.C.*, 145 FERC ¶ 61,007 (2013).

floodmaps are adequate for staff's review of the project, and use of the 2014 floodmaps would not alter the EA's conclusions.

#### **4. Construction and Restoration Procedures**

50. The CCPC requests additional information regarding "mini-crew construction" as it states this method appears preferable for overall pipeline installation. As described in section 1.7.1 of the EA, the mini-crew construction method reduces the number of workers by approximately one-third to one-fourth and uses a reduced number of pieces of equipment at the locations where the method is used. This method is typically used for site-specific areas to limit the required width of construction right-of-way and its consequent impact on landowners or sensitive resources. The use of the mini-crew construction method, however, increases the overall duration of construction and/or overall size of the construction workforce as more crews are necessary to meet project schedules. Because the East Side Expansion Project area is densely developed, the majority of the pipeline loop is expected to be constructed using this method.

51. CCPC requests an explanation of the difference between pressure testing and hydrostatic testing. Pressure testing is required by U.S. Department of Transportation (DOT) pipeline safety regulations at Title 49 of the U.S. Code of Federal Regulations, Part 192 (49 C.F.R. Part 192) to ensure the integrity of a pipeline and associated facilities. Pressure testing can include either hydrostatic testing, which uses water, or pneumatic testing, which uses air or an inert gas (such as nitrogen) to detect leaks. Columbia proposes to use hydrostatic testing for the pipeline loops. Aboveground facilities will also be pressure tested in accordance with Columbia standards and DOT regulations. The majority of pressure testing for these facilities is expected to be hydrostatic.

52. In a filing submitted on September 26, 2014, after the issuance of the EA, Columbia identifies a Line 1278 Loop modification that it is considering and requests approval of this modification and the use of modified workspaces. Columbia also identifies two minor route realignments of Line 10345, one of which would require the use of additional temporary workspaces. Because Columbia has not finalized the Line 1278 Loop modification, we are not approving its request at this time. Once it has completed its analysis of this modification, Columbia must file a request for Commission approval in accordance with Environmental Condition 5 of this order. Staff has reviewed the minor realignments of Line 10345 and the request for use of additional temporary workspaces and determines that these changes are acceptable and would not result in significant additional environmental impacts. Thus, we approve Columbia's two proposed route realignments of Line 10345, as described in its September 26, 2014 filing.

53. In addition, Columbia states that after further review of existing easements and clarification regarding the width of its existing rights-of-way, the additional land required

for permanent operation of Line 1278 Loop on numerous tracts has decreased in some instances, and increased in others. In total, the land requirements for the project permanent right-of-way increased by about 1.7 acres from what is stated in the EA. Staff reviewed these changes to the permanent right-of-way and determined that no significant impacts would result and that the changes do not alter the conclusions in the EA.

## **5. Blasting**

54. The CCPC requests that Columbia coordinate with the PADEP to ensure that all blasting permits and inspections of affected buildings take place in accordance with state regulations and requirements. Additionally, the CCPC requests that Columbia provide a minimum 72 hours' notice for occupants of buildings and farms near blasting activities. They also request that Columbia notify landowners with on-site wells located within 150 feet of these activities and Columbia monitor drinking wells, in the event of damage to their drinking water system.

55. As specified in Columbia's Blasting Plan, provided as Appendix 6B to Resource Report 6 of its application, blasting will proceed in accordance with applicable state regulations and requirements. A Blasting Activity Permit will be obtained from the PADEP for any blasting activity in Pennsylvania, and site-specific Blasting Plans will be submitted to PADEP for review. Columbia's Blasting Plan specifies that all occupants of nearby buildings, stores, residences, places of business, places of public gathering, and farmers will be notified at least 48 hours prior to blasting to protect personnel, property, and livestock. In addition, Columbia will conduct pre- and post-blasting testing of water wells within 150 feet of the blasting activities with landowner permission (as required by Environmental Condition 15). These tests may include a pump inspection, flow rate, and bacteriological cultures. We concur with the EA's conclusion that these measures are acceptable, and sufficiently address the CCPC's concerns.

## **6. Land Use**

56. The New Jersey Department of Environmental Protection's (NJDEP) Division of Land Use Regulation (DLUR) comments that applications for permits to authorize the current route alignment are being reviewed, and DLUR has requested revisions from Columbia to demonstrate compliance with relevant rules. These regulations include: the Freshwater Wetlands Protection Act Rules, the Coastal Permit Program Rules, the Coastal Zone Management Rules, and the Flood Hazard Area Control Act Rules. Supplemental comments filed by the NJDEP DLUR include concerns related to a recently identified deed restriction on one parcel in Woolwich Township. Columbia is in the process of addressing all comments received on its NJDEP permit application to date, including the comments received during the October 3, 2014 meeting between DLUR and Columbia's consultant AK Environmental, and the additional comments filed by NJDEP on November 26, 2014. It is at the discretion of the NJDEP to determine

whether Columbia has complied with the agency's permit application process and the Commission does not interfere with another agency's oversight of its own regulations. If additional measures are required to meet any permit requirements, Columbia would carry the burden of meeting those additional measures in order to receive the permit. If, as a result of the NJDEP permitting process, Columbia requires any project modifications, Environmental Condition 5 requires that Columbia file any such modification with the Commission for our review and approval prior to construction.

57. NJDEP also indicates that Columbia must obtain a tidelands instrument and an application should be submitted as soon as possible to meet Columbia's requested construction commencement and in-service date. Columbia filed a response to the comment noting that a Tidelands License application was submitted to the NJDEP Bureau of Tidelands on May 9, 2014.<sup>45</sup>

58. NJDEP comments that based on the information provided to them by Columbia, both the proposed Oldmans Creek Road and the Center Square Road routes along the Line 10345 Loop will impact Green Acres encumbered parkland (Block 3001, Lot 1 in Logan Township). Columbia filed a response to the comment, indicating that inclusion of Block 3001, Lot 1 on a list provided to NJDEP was in error, and stating that neither the Oldmans Creek Road Route nor the Center Square Road Route cross this parcel or any other Green Acres encumbered properties.<sup>46</sup>

59. The New Jersey SADC expresses concern about potential impacts on Transfer of Development Rights (TDR) credit allocations in the TDR Sending Areas.<sup>47</sup> The TDR program is adequately addressed in the EA, and the Commission agrees with the staff assessment that the project will not negatively affect the surface use of these lands.<sup>48</sup>

60. Commentors express concern about potential adverse impacts to three properties that are part of Upper Uwchlan Township's wastewater treatment and disposal system that would be crossed by the Line 1278 Loop. The CCPC requests that Columbia work

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<sup>45</sup> See Columbia October 14, 2014 Answer.

<sup>46</sup> *Id.*

<sup>47</sup> The TDR program allows owners of preservation areas to separate the development rights of their property from the property itself and sell them for use elsewhere. Developers may purchase these "credits" for use in areas deemed appropriate for growth.

<sup>48</sup> EA at 2-56 to 2-57.

cooperatively with the Upper Uwchlan Municipal Authority, Chester County Conservation District, Chester County Health Department, and PADEP to ensure that construction methods provide the least amount of impact on the Upper Uwchlan Township's spray and drip wastewater disposal. In a letter to CCPC dated October 21, 2014, Columbia states that it has a signed agreement with Upper Uwchlan Township to minimize effects regarding the wastewater reclamation area. In that agreement, Columbia commits to reducing its workspace to the smallest practical footprint in the disposal area. Columbia has also agreed to test and mitigate, as necessary, for compaction according to its Environmental Construction Standards (ECS) during restoration.<sup>49</sup> Based on Columbia's agreement and restoration measures, we conclude that impacts on the wastewater reclamation area will be appropriately minimized and mitigated.

61. CCPC notes that text in the EA incorrectly indicates that only two parcels under the Upper Uwchlan Township's system are crossed. We clarify here that a total of three parcels under this system are crossed. However, one of these will be crossed by the horizontal direct drill (HDD) method, which will avoid surface impacts on this system.<sup>50</sup> The CCPC also asks if Columbia intends to use the Agricultural Minimization Plan where the pipeline crosses the Upper Uwchlan Township wastewater reclamation fields. We clarify here that Columbia's Agricultural Minimization Plan was developed for use in agricultural lands and will be used in all areas of active crop production crossed by the project.

62. The CCPC also comments that the EA incorrectly states that there are no state parks within a mile of the project. Marsh Creek State Park is located west of the Line 1278 Loop route, between I-76 and Creek Road in Chester County, Pennsylvania. We clarify here that the park is within 0.5 mile of the route, but will not be crossed by construction. We conclude that project construction will not affect Marsh Creek State Park.

63. Energy Justice expresses concerns about the potential negative effects of the expansion of the Milford Compressor Station on local tourist attractions such as the Delaware State Forest, Black Walnut Inn, and nearby trail systems. Because the Milford Compressor Station is an existing facility, and there will be no expansion outside the existing fence line, we agree with the EA's findings that the project will not affect local tourism in the vicinity of Milford Compressor Station.

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<sup>49</sup> *Id.* at 2-9.

<sup>50</sup> *Id.*

64. Joanne C. Nelson and the CCPC are concerned about the potential effect of gas pipelines on property values including instances when homes are surrounded by multiple pipelines. Section 2.6.2 of the EA addresses this issue in detail and concludes there is no evidence to demonstrate that pipelines negatively affect land values. The CCPC notes a discrepancy in the text of the EA regarding median housing values. We clarify here that the median housing value in the counties that contain project facilities ranges from \$193,900 in Pike County to \$324,100 in Chester County.<sup>51</sup> This discrepancy has no effect on the overall conclusions in the EA regarding project affects to property values.

65. Chester County Water Resources Authority recommends that, prior to construction, Columbia provide contingency plans describing how it will remedy impacts on septic systems. Section 2.6.2 of the EA notes that Columbia is responsible for identifying the location of septic systems and restoring any damages that may occur. Furthermore, landowners can utilize Columbia's Landowner Complaint Resolution Process, required by Environmental Condition 17, and/or the Commission's Alternative Dispute Resolution service to file a complaint in an effort to remedy any outstanding septic system impacts during or following project construction.

66. CCPC requests coordination with Amtrak so that rail service will not be adversely affected. As identified in section 2.5.1 of the EA, Columbia will cross the Amtrak rail by the cased bore method, which will avoid any disruption of service. Columbia has agreed to comply with Amtrak's standard operating procedures and will coordinate with their personnel. We conclude these measures are sufficient to avoid adverse service impacts.

67. The CCPC requests that Columbia provide 48-hour notice to residents and municipalities when crossing specific features such as Interstate 76 and other road and railroad crossings. Columbia will notify affected landowners of construction activities in accordance with easement agreements. Columbia will also notify the townships and/or Chester County of the expected construction schedule at major road or railroad crossings in accordance with the guidelines of their road crossing permit conditions. We conclude these measures will provide appropriate notice to residents and municipalities regarding the road and railroad crossings.

## **7. Downingtown Area School District**

68. The Downingtown Area School District (DASD) indicates that it continues to be concerned about project-related impacts along the Line 1278 Loop on school properties and activities including maintaining unrestricted access to buildings, driveways, parking lots, sports fields, and other facilities. In comments filed on September 29, 2014, DASD

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<sup>51</sup> *Id.* at 2-61.

requests a detailed site plan showing the exact location of all construction areas, areas of disturbance, staging and laydown areas, and additional temporary workspaces, and requests a meeting with Columbia's engineering team. DASD requests additional safety measures for construction on and around a school. In additional comments filed on November 26, 2014, DASD requests that the Commission condition its approval of the project to include specific measures, which DASD includes as an attachment to their comments in a Special Undertakings Document. The issues addressed in the Special Undertakings Document include restoration of grounds and hard surfaces, erosion control and storm water management plans, continuation of access, timing restrictions, conflict resolution, reimbursement to DASD, security fencing, financial security, DASD-hired inspectors, hazardous materials, protection for other utilities, provisions for abandonment, and equipment storage. CCPC comments that Columbia must clearly communicate with the DASD regarding construction and/or hydrostatic testing should they occur during the school year and impact bus schedules and school access. In a September 26, 2014 supplemental filing, Columbia indicates that they may require additional workspace on DASD property to facilitate a newly proposed HDD of an adjacent wetland area.

69. The EA describes the actions Columbia would implement in order to minimize effects to schools and school activities. Further, the EA indicates that Columbia would coordinate construction activity with the school, install temporary construction fencing around the work area, limit the duration of open ditch construction, and employ a safety watchman onsite during school hours. Additionally, Columbia proposes to schedule work within roadways to avoid commuter traffic and effects to school bus schedules. Based on these measures, we conclude that construction in the vicinity of schools would not result in significant impacts.

70. Because Columbia has not finalized plans on DASD property, and based on the DASD's comments, Environmental Condition 27 requires Columbia to develop a detailed plan in consultation with DASD for construction activities across and in the vicinity of school properties. Some of the concerns that DASD addresses in its Special Undertakings Document concern easement issues, such as compensation. The Commission views matters of compensation to be a private matter to be negotiated between the parties. Therefore, we will not include a condition that Columbia must sign the DASD Special Undertakings Document. We believe that Environmental Condition 27 will adequately address DASD's environmental concerns.

## **8. Soils**

71. CCPC questions Columbia's plans for backfilling the trench and why a soil mound is the preferred method. Section 1.7.1 of the EA explains that, in upland areas, Columbia will leave a soil mound over the trench to allow for soil settlement, unless otherwise requested by the landowner. This technique is used only where settling is anticipated to



occur in order to prevent channelization over the pipe. After settlement, the grade should return to pre-construction contours. This is a standard industry best management practice to ensure restoration of post-construction contours.

72. The CCPC states that topsoil segregation should be required in any areas of sensitivity, and that it is not something that falls to a landowner to negotiate. As required under the Commission staff's *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures), which are incorporated in Columbia's ECS, topsoil segregation will be conducted in the following sensitive areas: cultivated or rotated croplands, and managed pastures; residential areas; hayfields; non-saturated wetland crossings; and other areas at the landowner's or land managing agency's request. Therefore, Columbia will segregate topsoil from subsoil in areas of sensitivity, and we conclude these measures address the CCPC's concern.

73. The CCPC recommends that Columbia coordinate with the Chester County Conservation District for all matters relating to erosion and sedimentation. In response, Columbia indicates that they filed an Erosion and Sedimentation Control Plan with the Chester County Conservation District in December 2013 that was supplemented in January, July, and August 2014. Columbia indicates that it is currently in the process of addressing technical comments received from the Chester County Conservation District, and states that it will submit revised plans before commencing construction.

## **9. Water Resources**

74. CCPC comments that it supports Environmental Condition 12 that requires a final geotechnical report for any portion of the project that has a higher potential for ground subsidence. However, the CCPC requests a requirement to include any additional information and plans for maintaining groundwater safety in areas where karst geology has been identified, and where an increased risk of contamination to groundwater occurs, in Columbia's Karst Terrain Plan. CCPC also requests that Columbia coordinate with the Chester County Health Department, Chester County Water Resources Authority, and PADEP to ensure public health and safety, as it relates to water supply.

75. We conclude that implementation of Columbia's ECS, SPCC Plan, and Karst Terrain Plan will protect groundwater quality in areas of karst geology. Also, Columbia is required to notify the National Response Center and the PADEP's Emergency Response Program if a spill occurs in excess of established reportable quantities. The PADEP's Emergency Response Program must also be notified when a pollutant, no matter what quantity, is discharged to surface or groundwater. We do not find that additional measures are warranted.

76. The CCPC expresses concern about impacts on public water supply intakes and suggests Columbia coordinate with the Downingtown Municipal Water Authority

(DMWA) to ensure that DMWA intakes are not adversely affected by the project. The CCPC also requests that Columbia establish a schedule of advanced notification for instream activities to DMWA and other downstream water suppliers. Columbia's application identifies two public water intakes, both in the East Branch of Brandywine Creek. Columbia states that it has consulted with the DMWA. The EA states that Columbia would cross the East Branch of Brandywine Creek using an HDD which will significantly minimize potential impacts on public water supply intakes. Based on Columbia's consultation and its use of an HDD, we have determined that public water supply intakes have been adequately addressed.

77. The Chester County Water Resources Authority expresses concern about Columbia's plan to discharge water used in hydrostatic testing back into well-vegetated upland areas adjacent to the right-of-way. The Chester County Water Resources Authority asks what, if any, water quality and thermal impacts may occur from internal pipe residues, chemicals or metals from the hydrostatic testing, and what measures will be taken to prevent impacts. The Chester County Water Resources Authority also recommends that Columbia alert them and all downstream water providers at least 24 hours in advance of discharge operations and provide the locations of where discharges will occur. The EA states that Columbia will obtain a National Pollution Discharge Elimination System (NPDES) General Permit for Discharges Resulting from Hydrostatic Testing of Tanks and Pipelines from the PADEP. Columbia has committed to conducting all test water discharges in compliance with state and federal discharge permitting requirements.<sup>52</sup> Consistent with the finding in the EA, we conclude that implementation of Columbia's hydrostatic test will not result in surface or ground water quality impacts.

78. CCPC questions why Columbia did not coordinate the crossing of the Struble Trail and Brandywine Creek with the Williams/Transco pipeline in order to minimize impacts. Columbia's proposed Line 1278 Loop will avoid impacts on the Struble Trail and Brandywine Creek through the use of an HDD. The Williams/Transco pipeline crosses Brandywine Creek and the Struble Trail at a location where an HDD was determined to be geotechnically infeasible. Thus, we find any crossing at this location would have to be accomplished by the open cut method, resulting in additional environmental impacts that are avoided in Columbia's proposal.

79. The Chester County Water Resources Authority provides numerous comments concerning Brandywine Creek. These comments address potential impacts on Brandywine Creek and its watershed, required tree clearing, revegetation, and potential

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<sup>52</sup> EA at 2-19.

downstream flooding. Section 2.2.1 of the EA states that the Line 1278 Loop would not affect a protected reach of the East Branch of Brandywine Creek. As discussed previously, Columbia would cross Brandywine Creek using an HDD.<sup>53</sup> Based on information provided in the EA that explains Columbia's use of an HDD, its proposed construction and restoration methods, and its use of impact minimization measures, we find that potential impacts on Brandywine Creek were adequately addressed in the EA and concur with the EA's findings that the project's impacts on waterbodies would not be significant.

80. In a supplemental filing submitted after the issuance of the EA, Columbia states that it determined the direct pipe and HDD crossing methods of the Beaver Creek are not feasible. Columbia now states it proposes to use a conventional bore at the first crossing of Beaver Creek, located at milepost ("MP") 7.8 of the Line 1278 Loop, and is currently evaluating the feasibility of conventional bore versus a dry open cut method at the second crossing of Beaver Creek, located at MP 8.1. Because Columbia is still conducting geotechnical investigations to ensure constructability with minimal impact on Beaver Creek, Columbia requests approval of sufficient additional workspace at Beaver Creek Crossing #2 to accommodate either the conventional bore or dry open cut crossing method. Commission Staff continues to analyze the revised crossings. Thus, we have modified Environmental Condition 14 of this order to include site-specific plans for the crossing. We are confident that this condition will ensure adequate protective measures are developed and implemented to minimize adverse impacts on these waterbodies.

## **10. Wetlands**

81. The Delaware Riverkeeper states that the project violates Chapter 105 of the Pennsylvania Code because it will have an adverse impact on several exceptional value wetlands in Pennsylvania. As explained in section 2.2.3 of the EA, no exceptional value wetlands will be affected by the project. The CCPC also comments on forested wetlands, requesting additional information justifying these impacts. As stated in the EA, the project will permanently impact less than one acre of forested wetlands. Based on the collocation of the project loops with Columbia's existing pipeline and other existing rights-of-way, the adoption of several route variations to minimize environmental impacts, and Columbia's proposed construction methods and impact minimization measures, the EA concludes that the project will not have significant adverse effects to wetlands. We concur.

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<sup>53</sup> *Id.* at 1-18.

82. The Chester County Water Resources Authority requests additional details regarding the final wetland mitigation project site(s) and plans in the Brandywine-Christina Watershed. The CCPC also requests that wetlands permitting be coordinated with county agencies. Wetland permitting and mitigation work is conducted under the jurisdiction of the COE and in consultation with the PADEP. These efforts also involve public input opportunities open to Chester County agencies. We do not interfere with another agency's oversight of its own regulations. As required by Environmental Condition 9, Columbia will not be authorized to construct the project without documentation of all applicable authorizations under federal law. Therefore, the EA properly concludes that wetland impacts will be minimized and compensated for as required by the applicable permitting agencies.

### **11. Threatened and Endangered Species**

83. In its comments on the EA, the U.S. Fish and Wildlife Service (FWS) concurs with the staff's determination that the project is not likely to adversely affect sensitive joint-vetch, a plant species protected under the Endangered Species Act. In a supplemental filing after the issuance of the EA, Columbia states that based on the FWS' concurrence and the absence of sensitive joint-vetch plants in the project area, an impact avoidance plan as recommended in the EA is not necessary. We agree and are not including the EA's recommended Environmental Condition 16, as a condition of this order.

84. The CCPC states that the EA did not address bald eagles in Chester County. Columbia responded to this comment stating that it consulted with the FWS and that the FWS had not identified the bald eagle as a concern in Chester County. During its review, the Commission's staff also consulted with the FWS and confirmed that the bald eagle was not a concern in Chester County. The EA addressed potential impacts on the bald eagle in New Jersey. Additionally, the FWS concurred that the project will not disturb the bald eagle nest identified in New Jersey. Because we conclude that section 7 informal consultation with the FWS under the Endangered Species Act is complete, we are not including the EA's recommended Environmental Condition 17, as a condition of this order.

### **12. Agriculture**

85. The New Jersey SADC expresses concerns about several issues including mapping discrepancies, amount of topsoil segregation, pipeline depth of cover, potential impacts on Transfer of Development Rights, and limitations on agricultural use of farmlands following construction of the project. The SADC also requests an alternative analysis for the selection of temporary storage and staging areas to avoid lands in production in New Jersey's designated Agricultural Development Areas. As addressed above, Environmental Condition 4 requires Columbia to provide any revised detailed survey

alignment maps prior to construction to address any mapping discrepancies or revisions. Columbia will segregate up to 12 inches of topsoil in areas that are annually cultivated or have crops rotated, and Columbia will bury the pipe to allow a minimum of 4 feet of cover in actively tilled agricultural areas unless a different amount of cover is requested by the individual landowner.<sup>54</sup> Columbia will negotiate with individual landowners to determine the appropriate depth of pipe as part of the easement agreement negotiations. Additionally, to minimize potential impacts, Columbia will implement an Agriculture Impact Minimization Plan which addresses concerns previously raised by the New Jersey SADC. Because impacts on agricultural activities will be temporary, including temporary storing and staging areas, and agricultural activities over active pipelines are commonplace, we concur with the EA's findings that construction and operation of the project will not significantly affect agricultural land use.

86. The CCPC requests that Columbia coordinate with the Chester County Conservation District, as many affected farms could have Agricultural Conservation Plans in place. In response, Columbia has indicated that it will continue to consult with the Chester County Conservation District regarding best management practices to minimize impacts on agricultural lands and will address Agriculture Conservation Plans during easement negotiations.

87. CCPC requests that the pipe/contractor wareyard for the proposed Line 1278 Loop in Chester County, consisting of approximately 25 acres classified as agriculture, receive the same treatment as agricultural land in the pipeline construction workspace. More specifically, the CCPC states that Columbia should ensure preservation of the topsoil in this wareyard for future agricultural use. Columbia has committed to segregate and stockpile the upper 12 inches of topsoil (or full depth of topsoil, if less than 12 inches is present) in the proposed wareyard for the proposed Line 1278 Loop. After construction of the project is complete and the contractor yard is no longer required, the topsoil will be restored at this location. We find these procedures address CCPC's concerns.

### **13. Cultural Resources**

88. The Chester County Heritage Preservation Coordinator/Preservation Officer comments that the CCPC should have been invited to be a consulting party for the National Historic Preservation Act section 106 review, and requests reports and correspondence regarding the project. They indicate there are several properties of concern in the vicinity. As stated in the EA, Columbia provided the Chester County Historical Society information about the project in a letter dated April 23, 2014, and

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<sup>54</sup> EA at 1-19.

received no comments. The Commission staff sent Chester County the NOI on June 6, 2013, and a supplemental NOI on October 1, 2013. The NOI includes the statement that we use the notice to solicit the views of State Historic Preservation Offices (SHPO), other government agencies, interested Indian tribes, and the public on the project's potential effects on historic properties. Thus, through the NOI, we gave CCPC the opportunity to be a consulting party. We did not receive a response and it is too late to accept CCPC as a consulting party at this time. As described in the EA, Columbia has surveyed the project area for archeological and architectural resources, provided survey reports to the SHPOs, and the Commission has received concurrence with the results. Commission staff will request that Columbia provide the relevant reports and concurrence letters to the Chester County Heritage Preservation Office.

89. The Chester County Heritage Preservation Coordinator/Preservation Officer indicated that there are several historic sites that were not considered in the EA that may be affected, including: the Strickland Todd House in Upper Uwchlan Township, Dowlin Forge in Uwchlan Township, and the Ship Tavern (now called the Orangery at Glen Isle) in Downingtown Borough. These structures were not identified within the project area's potential effects for direct or indirect impacts. We clarify that structures located outside of the area of potential effect for the project would not be affected by construction.

90. Since the EA was issued, Columbia received comments from the New Jersey and Pennsylvania SHPOs in letters dated September 15 and 25, 2014, respectively, concurring with the results of the architectural survey reports. However, we are still waiting on the avoidance plans. Thus, Environmental Condition 21 reflects the updated information.

#### **14. Air Quality and Noise**

91. Many commentors express concern about volatile organic compounds (VOC) emissions from storage tanks at the Milford Compressor Station, as well as the transportation, removal, and disposal of hazardous waste, stating that Columbia has not provided the SPCC Plan for those materials. Energy Justice comments that the EA does not provide documentation regarding the size, type, manufacturer, specifications, method of installation, tank tending, maintenance schedule, and transportation of hazardous liquids offsite.

92. The commentors misunderstand the relationship of VOC emissions from the storage tanks at the Milford Compressor Station; the transportation, removal, and

disposal of hazardous waste; and Columbia's SPCC Plan.<sup>55</sup> As described in the EA, all of the emission sources at the Milford Compressor Station will be regulated by federal or state air quality regulations, including VOC emissions from the storage tanks. Further, the details regarding size, type, and manufacturer of the storage tanks is required for air quality permitting requirements for PADEP's Bureau of Air Quality, and are not necessary for inclusion in the EA as Columbia will be required to comply with state and federal requirements for storage, transportation, and disposal of hazardous waste at its facilities.

93. Energy Justice and Linda Reik assert that frequent temperature inversions in the project region of Pennsylvania will subject residents to ground-level ozone caused by nitrogen oxides, VOCs, and carbon monoxide from the Milford Compressor Station. The comments suggest that the air dispersion modeling analysis in the EA did not account for temperature inversions. As explained in the EA at 2-91, the air dispersion modeling analysis does account for meteorological data. In developing State Implementation Plans, states such as Pennsylvania, must take into account meteorological conditions and resulting ambient air concentrations in order to maintain compliance with National Ambient Air Quality Standards (NAAQS) (i.e., attainment) and/or to enforce air quality control regulations for non-attainment areas to reach compliance with the NAAQS. The PADEP will enforce state air quality control regulations as part of its state permitting process for the Milford Compressor Station. We agree with the EA's conclusion that the potential air quality impacts associated with operation of the Milford Compressor Station would be minimized by adherence to all applicable federal and state regulations and operation of the facilities will have no significant impact on regional air quality.

94. Gregory Lotorto filed comments regarding the EA's description of Federal Class I Areas as protected areas for air quality impacts. Mr. Lotorto contends that the Delaware Water Gap Recreational Area is a sensitive area that must also be protected. While we recognize that the Delaware Water Gap National Recreation Area may be within approximately one mile of the Milford Compressor Station, the list of Federal Class I Areas, as identified in 40 Code of Federal Regulations (C.F.R.) 81, does not include the Delaware Water Gap National Recreation Area. Subpart D of 40 C.F.R. 81, lists those mandatory Federal Class I areas established under the Clean Air Act of 1970, as amended in 1977 and 1990. The Delaware Water Gap National Recreation Area is classified as Class II, along with the remainder of the United States, with the exception of heavily industrialized zones. Nevertheless, the Clean Air Act remains the federal regulatory framework for establishing the NAAQS that ensures protection of human health and

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<sup>55</sup> Columbia's SPCC Plan was filed with its application on November 1, 2013, and is available for public review through the Commission's eLibrary system.

public welfare, which includes protection from detriments such as reduced visibility and damage to vegetation and animals. As discussed in the EA, the Milford Compressor Station will be in compliance with the NAAQS and all of the provisions in the Clean Air Act.

95. Linda Reik also requested that FERC use current scientific information that details the harm that fossil fuel air pollutants cause to human health for evaluating the impacts of the East Side Expansion Project. As stated previously and reiterated here, the Clean Air Act remains the federal regulatory framework for protection of human health and public welfare from air pollution. As discussed in the EA, the associated air quality impacts from the project were analyzed consistent with the federal and state air quality requirements. The EA appropriately concluded that the East Side Expansion Project will be in compliance with all of the provisions of the Clean Air Act.

96. Gregory Lotorto and Linda Reik comment that the EA air quality analysis is inadequate for the Milford Compressor Station because it fails to take topography into consideration. Mr. Lotorto states further that the EA shows results of air modeling based on offsite locations that are not similar and not in the "vicinity" of the compressor station. We disagree. As stated in the EA, the screening mode of AERMOD<sup>56</sup> was used for the air dispersion modeling analysis for the Milford Compressor Station. Receptor heights in the modeling analysis were determined using the AERMAP terrain processor, which is an automated process using digital elevation model data. In addition, the ambient concentrations were primarily the nearest air quality monitoring stations near the Milford Compressor Station and as such, are representative of the ambient pollutant concentrations. A list of the air quality monitoring sites in Pennsylvania can be found on the PADEP's Bureau of Air Quality's website. We note that the modeling analysis completed by Columbia is a comprehensive and conservative analysis. The EA analyzed the results and found that the modified Milford Compressor Station will not result in a violation of the NAAQS. We concur.

97. Shirley Masuo expresses concern about air pollution in Shola, Pennsylvania, just a few miles from the Milford Compressor Station, indicating that it will be in violation of the Air Pollution Control Act. In addition, several commentors, including Energy Justice, assert that the Milford Compressor Station will emit the equivalent emissions as that of 71 idling school buses. Ms. Masuo refers to the definition of air pollution in Title 25 of the Pennsylvania Code, Section 121.1. However, the definition she refers to is merely a general description of air pollution. The specific criteria for assessing pollution is

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<sup>56</sup> AERMOD is an EPA approved air quality quantitative modeling program that provides a comprehensive and conservative analysis of air quality impacts.



provided in federal and state air quality regulations for stationary and mobile emission sources within Pennsylvania. The Clean Air Act of 1970, as amended in 1977 and 1990, is the basic statute governing the control of air pollution for both federal and state air quality programs. The EA discusses the air quality impacts of the Easton and Milford Compressor Stations and the required compliance with the applicable federal and state standards. The EA concludes that based on the analysis conducted and adherence to all applicable federal and state standards, the construction and operational air quality impacts will not result in a significant impact on air quality. We agree.

98. Several commentors assert that Columbia fails to include best available technology and standards to prevent toxic emissions in the residential areas where the Milford Compressor Station is located. We disagree. Section 2.8.1 of the EA indicates that turbines at the Easton and Milford Compressor Stations will meet best available technology requirements, as established in the PADEP's revised General Permit BAQ-GPA/GP-5, General Plan Approval and/or General Operating Permit for Natural Gas Compression and/or Processing Facilities.<sup>57</sup>

99. Additionally, several commentors, including Energy Justice, contend that total projected emissions should be based on actual emissions rather than permitted emissions. The commentors point to the operational emissions in 1999 and 2012, which were far less than would have been experienced if the station had been operating at full-load capacity. While we acknowledge that the Milford Compressor Station has not operated at full capacity, our analysis of air quality impacts focuses on permitted emissions to be consistent with federal and state permitting requirements and State Implementation Plans that ensure that air quality in the states meet the NAAQS. Further, in addition to comparing previously permitted emissions to the proposed emissions for the Milford Compressor Station, the EA also provides an air dispersion modeling analysis that utilizes ambient air background concentrations from the years 2010 through 2012, within the period mentioned by the commentors in which the Milford Compressor Station operated at less than full-load capacity. We find that the methodology for assessing air quality impacts as described above is appropriate.

100. The Clean Air Council filed comments stating that the EA did not quantify the fugitive emissions that would come from the liquefaction facilities. We clarify here that the project does not include liquefaction facilities.

101. Energy Justice also comments that noise surveys should include periods of blowdowns which are significantly louder than normal operating conditions and indicates

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<sup>57</sup> EA at 2-84.

that continuous noise monitoring equipment should be installed by a third party or by the Commission to monitor noise levels on a regular basis. While we agree that blowdown events, whether as a result of maintenance activities or emergencies, generate noise levels that are higher than normal operating conditions at compressor stations, we emphasize that these events are non-routine in nature, temporary, and are short-term in duration. Further, and as stated in section 2.8.2 of the EA, Columbia will install unit blowdown silencers for each proposed compressor unit at the Milford and Eastern Compressor Stations to minimize the resulting noise from blowdown events. For these reasons, we do not believe that blowdown events will be a significant contributor to operational noise from the modified compressor stations and concur with the EA's conclusion that the noise attributable to the operation of the Milford and Eastern Compressor Stations will not be a significant impact.

### **15. Reliability and Safety**

102. Several commentors express concern for safety and request appropriate planning and communication with local emergency responders. The CCPC questions the need for additional emergency planning in locations where residences will be within 15 feet of construction areas. As detailed in section 2.8 of the EA, Columbia has designed and will construct, operate, and maintain the project in accordance with pipeline safety regulations at Title 49 of the U.S. Code of Federal Regulations, Part 192 (49 C.F.R. Part 192), which are protective of public safety. The Commission has a *Memorandum of Understanding on Natural Gas Transportation Facilities* with the DOT which has exclusive authority to promulgate federal safety standards used in the transportation of natural gas. The DOT prescribes the minimum standards for operating and maintaining pipeline facilities, including the requirement to establish emergency plans; maintain liaison with appropriate fire, police and public officials; and establish a continuing education program.<sup>58</sup> We note the DOT does not have different safety standards for pipelines within 15 feet of residences. The DOT, however, does define area classifications, based on population density in the vicinity of the pipeline, and specifies more rigorous safety requirements for populated areas.

103. The EA addresses comments from Delaware Riverkeeper regarding the maximum flow velocity for the new pipeline, and concludes that the anticipated flow velocities on Columbia's system would not result in unsafe operating conditions.<sup>59</sup> Delaware Riverkeeper claims that the EA's findings are unsupported because they are not based on

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<sup>58</sup> EA at 2-106.

<sup>59</sup> *Id.* at 2-109.

any supporting studies or documents contained in the EA.<sup>60</sup> Delaware Riverkeeper comments that additional information is needed to develop a hydraulic profile, so that the Commission and the public can confirm the safety ramifications of the project.<sup>61</sup>

104. The record concerning gas velocities on Columbia's Line 1278 Loop is substantial and supports the EA's findings. The EA's findings are based on: (1) the flow diagrams and the hydraulic models, for both existing and proposed operating conditions;<sup>62</sup> (2) Columbia's May 21 and October 14, 2014 answers to the comments filed by Delaware Riverkeeper, and (3) Columbia's responses to three Commission staff data requests regarding gas stream velocities associated with the expansion project.

105. The information requested by Delaware Riverkeeper is already in Exhibit G to the application as part of Columbia's hydraulic flow models and diagrams, for both existing and proposed operating conditions, and was relied on in the EA's findings. Because this information is considered Critical Energy Infrastructure Information (CEII) or Privileged Information, it was not included in the public EA.<sup>63</sup>

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<sup>60</sup> The Delaware Riverkeeper asserts that the Commission fails to explain why it is allowing Columbia to operate at velocities higher than its stated design threshold of 50 ft/sec while it denied Tennessee Gas Pipeline Company's similar request. Comments at 7-8 (citing Tennessee Gas Pipeline Company, Northeast Upgrade Project, Docket No. CP11-161-000, EA at 3-3, November 2011).

<sup>61</sup> Delaware Riverkeeper requests that Columbia identify: pipe diameters and where they change; pipe grades and where the grades change; pipe wall thickness, mileage for each pipe grade along the system; maximum allowable operating pressure for each pipe segment and where it changes; for each pipeline segment, the location of gas meters that may be used to allocate gas flow between the various segments; gas flow rates in million standard cubic feet per day; pressures at the respective inlet and delivery points along the system for peak flow case; at each compressor station, include the compressor horsepower, fuel usage, compressor suction pressure, compressor discharge pressure, compression ratio, and gas volume.

<sup>62</sup> The hydraulic models were developed and analyzed using DNV GL's Synergi gas pipeline simulation software.

<sup>63</sup> We note that Delaware Riverkeeper requested and obtained certain CEII information related to these matters from the Commission.

106. Delaware Riverkeeper provides no support for its contention that gas velocities on Columbia's pipeline will present a threat to pipeline safety. Nor has it refuted any of the record evidence that shows that the flow velocity on the 7.7 mile portion of Line 1278 is well below the estimated erosional velocity for the pipeline. As noted in the EA, the DOT, which is responsible for the safety of interstate pipeline systems, does not specify a maximum velocity in its regulations. For these reasons, we affirm the EA's finding that Columbia's proposed expansion project will not result in unsafe operating conditions.<sup>64</sup>

107. Joseph W. Zenes and Linda Reik comment that the EA fails to address the connection to the Tennessee Gas Pipeline Company's (Tennessee) meter station, as well as the fact that the meter station was incorrectly installed in a federally protected wetland, and that gas has been leaking from the facility. Section 1.4 of the EA describes the connection to Tennessee's meter station and the environmental impacts of this portion of the project are assessed throughout the EA. Issues regarding the siting and environmental effects from the construction of Tennessee's meter station were addressed in a separate proceeding in Docket No. CP11-161-000.<sup>65</sup> Comments to the Commission regarding leaking gas from Tennessee's meter station were communicated by Commission staff to Tennessee for corrective action, and the issue was resolved.

#### **16. PCBs and Asbestos Containing Material**

108. Over 150 commentors express concern about PCBs and asbestos containing materials (ACMs). Many of these commentors express concern that PCBs and ACMs could be released during the proposed demolition/modification of the Milford Compressor Station and adversely affect human health. These commentors also state that public review of related information to be filed by Columbia prior to construction of the project is critical. Additionally, Ms. Reik submitted a copy of comments she made to the PADEP regarding the Milford Compressor Station and the potential for impacts related to the presence of PCBs. Recognizing the potential for impacts related to the presence of PCBs and ACMs, we are including the EA's recommended Environmental Conditions 25 and 26 in this this order. These conditions require Columbia to address PCB and ACM

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<sup>64</sup> We are approving Columbia's proposal here based on our finding that erosional velocities on its system will not be exceeded. In the referenced Tennessee Gas Pipeline Company proceeding, the pipeline presented a compression only alternative that was not pursued because it would result in gas velocity significantly above Tennessee's recommended maximum design velocity that "could compromise the pipeline's integrity and safety." EA, Northeast Upgrade Project at 3-3.

<sup>65</sup> See *Tennessee Gas Pipeline Co., L.L.C.*, 139 FERC ¶ 61,161 (2012).

issues, including the handling and disposal of these materials, in a filing with the Commission prior to any abandonment activities. This filing would be entered into the Commission's administrative record and available for public review and comment. Furthermore, Columbia must comply with 40 C.F.R. Parts 761 and 763, regarding abandonment and disposal of any PCB- and ACM-contaminated facilities. Compliance with these requirements ensures the health and safety of the public from any PCB- and ACM-contaminated facilities that are abandoned.

109. As stated above, Environmental Conditions 25 and 26 of this order require Columbia to file plans, for Commission review and approval prior to construction, for the control and handling of PCBs and ACMs identified at any project facilities Columbia proposes to abandon or disturb. Commission approval to proceed with construction will not be granted until the staff is satisfied the plans are adequate and safe for workers and the public.

## **17. Cumulative Impacts**

110. The Allegheny Defense Project, the Clean Air Council, and CCPC comment on the scope of the EA's assessment of cumulative impacts analysis, Marcellus Shale drilling, air impacts, vegetation, and forest fragmentation. As explained below, we find these concerns are unfounded.

111. Cumulative impacts are defined by CEQ as the "impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or persons undertake such actions."<sup>66</sup> A cumulative impacts analysis may require an analysis of actions unrelated to the proposed project if they occur in the project area or region of influence of the project being analyzed.<sup>67</sup> CEQ states that "it is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful."<sup>68</sup> An agency is only required to include "such information as appears to be reasonably necessary under the circumstances

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<sup>66</sup> 40 C.F.R. § 1508.7 (2014).

<sup>67</sup> CEQ Guidance, *Considering Cumulative Effects Under the National Environmental Policy Act* (January 1997).

<sup>68</sup> *Id.* at 8.

for evaluation of the project rather than to be so all-encompassing in scope that the task of preparing it would become either fruitless or well nigh impossible.”<sup>69</sup>

112. An impact is “reasonably foreseeable” if it is “sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.”<sup>70</sup> Courts have noted that the starting point of any NEPA analysis is a “rule of reason,” under which NEPA documents “need not address remote and highly speculative consequences.”<sup>71</sup> CEQ adds that “it is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.”<sup>72</sup>

113. Consistent with CEQ guidance, to determine the scope of the cumulative impact analysis in an EA, Commission Staff establishes a “region of influence” to define the area affected by the proposed action in which existing and reasonably foreseeable future projects may also result in cumulative impacts. A project’s region of influence varies depending on the resource being discussed. The EA considers an approximately 0.5 mile radius as the project area/region of influence for most resources impacted, except for air quality. The EA considers several such projects including other natural gas transmission projects and commercial and residential developments and listed them in table 2.10.1. The EA evaluates the potential cumulative impacts of those projects on soils; water resources and fisheries; wetlands; vegetation and wildlife; threatened, endangered, and other special status species; land use and visual resources; traffic; air quality and noise; and climate change. The EA concludes that when considered with the other projects planned or ongoing within the project area, the project would not result in significant long-term cumulative effects.

114. The Clean Air Council states that the EA's cumulative impact analysis is inadequate because the area considered for cumulative impacts (approximately 0.5 mile radius) is too small. Additionally, the Clean Air Council states that the list of "Present and Reasonably Foreseeable Future Actions" is insufficient because it does not contain

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<sup>69</sup> *New York Natural Res. Def. Council, Inc. v. Kleppe*, 429 U.S. 1307, 1311 (1976) (citing *Natural Res. Def. Council v. Calloway*, 524 F.2d 79, 88 (2d Cir. 1975)).

<sup>70</sup> *Sierra Club v. Marsh*, 976 F.2d 763, 767 (First Cir. 1992).

<sup>71</sup> *Hammond v. Norton*, 370 F.Supp. 2d 226, 245-46 (D.D.C. 2005).

<sup>72</sup> CEQ Guidance, *Considering Cumulative Effects Under the National Environmental Policy Act* (January 1997).

any projects with a construction date starting later than 2014. The Clean Air Council also indicates that the cumulative effects analysis is inadequate because the Commission's analysis relies on the assumption that other projects must adhere to federal, state, and local regulations.

115. As cumulative impacts are additive, the EA limits the cumulative impacts analysis to the area affected by the proposed project (region of influence). The region of influence is established on a project-by-project basis and is specific to the resource affected and the magnitude of the other projects being considered. For the East Side Expansion Project, based on the small magnitude of the project and the lack of significant impacts on resources, staff concluded that a 0.5 mile radius for cumulative impacts analysis was sufficient for all but air impacts, which is discussed in more detail below. The rationale for limiting the region of influence for waterbodies to 0.5 mile rather than the entire watershed was based on the limited scope and minor potential impacts of the project on waterbodies. Columbia will use the HDD method to avoid direct impacts to most of the larger waterbodies, and will cross all other waterbodies with perceptible flow at the time of crossing using a dry crossing method that will limit potential impacts to minor and temporary effects. The Commission staff analyzed the cumulative impacts of the project on waterbodies when added to other projects within the region of influence and concluded that the cumulative impacts would be minor and that consideration of all projects in the Delaware Basin Watershed was not necessary. We concur.

116. Moreover, while Clean Air Council complains that the EA's list of reasonably foreseeable projects does not contain any projects with a construction date starting later than 2014, they fail to identify any other project in the region of influence that should have been considered. We also find that the Clean Air Council's assertion that the EA's finding of no significant impacts erroneously relies on the fact that other projects in the project area would have to adhere to applicable federal, state, and local regulations is without support.

117. The Allegheny Defense Project and the Clean Air Council both claim that the EA is deficient because it fails to look at the cumulative impacts of natural gas production, including drilling activities in the Marcellus and Utica Shale formations. They disagree with the EA's statement that it is highly difficult and speculative to identify and quantify cumulative impacts of natural gas production. In support, the Allegheny Defense Project cites to information on the website of Cabot Oil and Gas Corporation (Cabot), a project shipper, which discusses the company's production activities in Northern Pennsylvania

and indicates that most of the company's 200,000 net acres of Marcellus Shale reserve is in Susquehanna County.<sup>73</sup>

118. We disagree that the Commission was required to consider impacts from future gas drilling in its cumulative impact analysis for this project. The EA states that an analysis of gas production wells was not included because the impacts of such actions occur or would occur outside the project's region of influence and span a different period of time. In response to a comment on air quality, the EA explained that no shale drilling activities are present in the project area except for in Pike County, Pennsylvania. The EA concludes that while the project and Marcellus Shale drilling activities could contribute cumulatively to existing air emissions to a limited extent, the project would not result in a significant cumulative impact on regional air quality. The EA also found that an analysis of the cumulative air quality impacts associated with the project and direct and indirect emissions from future Marcellus Shale development activities would be highly speculative, at best. We concur with these conclusions.

119. While natural gas development will take place in the broad Marcellus and Utica Shale Regions, the Allegheny Defense Project fails to show that the explanatory information on Cabot's website (or elsewhere) identifies information that would assist the Commission in identifying the timing and location of wells and related infrastructure, much less the associated potential impacts of natural gas drilling, in the project area. As we have found in prior proceedings, the full range of Marcellus Shale development is both widespread and uncertain in nature and timing, making it highly difficult and speculative to identify and quantify cumulative impacts of possible future drilling relating to pipeline projects.<sup>74</sup> Accordingly, the level of analysis commenters seek would require the Commission to engage in speculative analysis that would not provide meaningful information to inform our decision here.<sup>75</sup>

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<sup>73</sup> Allegheny Defense Project Comments at 4. The Allegheny Defense Fund also points out that the EIS prepared by the U.S. Forest Service for the Allegheny National Forest Land and Resource Management Plan and a report by the Nature Conservancy included information on impacts of future gas extraction.

<sup>74</sup> *Cent. New York Oil & Gas Co. LLC*, 138 FERC ¶ 61,104, at P 7 (2012) *upheld by Coal. for Responsible Growth and Res. Conservation v. FERC*, 485 Fed. Appx. 472 (2d Cir. 2012).

<sup>75</sup> Unlike the limited scope of the project here, the referenced EIS prepared for the Allegheny National Forest was a Plan for the Management of the Allegheny National Forest for a 10 to 15 year period. It states the "FEIS discusses broad-scale environmental

(continued...)



120. The Allegheny Defense Fund cites *Northern Plains Resource Council v. Surface Transportation Board (Northern Plains)*<sup>76</sup> in support of its contention that future production is reasonably foreseeable. *Northern Plains* addressed the issue of whether the Surface Transportation Board should have considered the cumulative impacts of coal bed methane (CBM) well development as part of its NEPA analysis of a proposed 89-mile-long rail line intended to serve specific new coal mines in three Montana counties. *Northern Plains* is distinguishable because, as part of an earlier, programmatic EIS, the Bureau of Land Management had already analyzed reasonably foreseeable CBM well development which provided the Surface Transportation Board with information about the timing, scope, and location of future CBM well development. Here, the Commission has no similar information in the present case about the timing, location, and scope of future shale (or conventional) well development in the project area. Moreover, as the Commission has previously found, *Northern Plains* establishes that while agencies must engage in reasonable forecasting in considering cumulative impacts, NEPA does not require an agency to “engage in speculative analysis” or “to do the impractical, if not enough information is available to permit meaningful consideration.”<sup>77</sup>

121. The CEQ guidance on cumulative impacts assessments advises that agencies have substantial discretion in determining the appropriate level of the cumulative impacts assessments.<sup>78</sup> CEQ states that an agency should relate the scope of its analysis to the magnitude of the environmental impacts of the proposed action. Accordingly, proposed

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effects and establishes a useful reference that can be tiered to for compliance with environmental laws at the project level. The level of effects disclosure is commensurate with the programmatic nature of this decision.” U.S. Forest Service, *Record of Decision for Final Environmental Impact Statement and the Land and Resource Management Plan, Allegheny National Forest*, at ROD-4 (2007) (available at <http://www.fs.usda.gov/main/allegheny/landmanagement/planning>). The Nature Conservancy report was a Pennsylvania Energy Impact Assessment for a 20-year time period.

<sup>76</sup> 668 F.3d 1067, 1081 (9th Cir. 2011).

<sup>77</sup> See *Sabine Pass Liquefaction LLC*, 140 FERC ¶ 61,076, at P 17 (2012) (citing *Northern Plains*, 668 F.3d 1067 (9<sup>th</sup> Cir. 2011)).

<sup>78</sup> The Supreme Court has similarly held that “determination of the extent and effect of [cumulative impacts], and particularly identification of the geographic area within which they may occur, is a task assigned to the special competency of the appropriate agencies.” *Kleppe v. Sierra Club*, 427 U.S. 390, 413 (1976).

actions that result in a finding of no significant impact usually involve only a limited cumulative impact analysis to confirm that the proposed action would not, in fact, have a significant impact on the environment.<sup>79</sup> Given both the limited scope of Columbia's project and the minimal environmental footprint, we find that the broader cumulative effects analysis sought by Allegheny Defense Project and the Clean Air Council is not required under NEPA.

122. Additionally, Allegheny Defense Project asserts that the "Commission is obligated to consider the cumulative impacts of natural gas extraction in conjunction with gas infrastructure projects because the Commission's 'official policy is to increase the nation's reliance on natural gas.'"<sup>80</sup> Thus, Allegheny Defense Project appears to suggest that a programmatic EIS that considers all natural gas activity over the Marcellus and Utica Shale formations is required.

123. These claims are unfounded. CEQ regulations state that major federal actions for which an EIS may be required include "programs, such as a group of concerted actions to implement a specific policy or plan; [and] systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive."<sup>81</sup> The East Side Expansion Project is a project to increase capacity on the Columbia system in order to provide transportation service to five project shippers. It is not a broad program or plan for regional gas exploitation. Moreover, the Commission's official policy is not to increase the nation's reliance on natural gas. Rather, the Commission considers individual proposed infrastructure projects on their own merits, pursuant to its statutory obligation under NGA section 7(c).

124. We disagree with the Clean Air Council's assertion that the cumulative impacts on air quality were not adequately addressed. Section 2.8.1 of the EA explains that the U.S. Environmental Protection Agency (EPA) sets the NAAQS, which are implemented by the states via State Implementation Plans. While Commission-jurisdictional projects are in fact individually regulated, they must comply with federal regulations, as implemented through State Implementation Plans, which require companies to report operational

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<sup>79</sup> CEQ, *Memorandum on Guidance on Consideration of Past Actions in Cumulative Effects Analysis* at 2-3 (June 24, 2005); *see also El Paso Natural Gas Co.*, 136 FERC ¶ 61,175, at P 5 (2011).

<sup>80</sup> Allegheny Defense Project Comments at 8 (citing various reports including the Commission's Strategic Plan FY 2014-2018).

<sup>81</sup> 40 C.F.R. § 1508.18(b)(3) (2014).

emissions from applicable stationary sources. In addition, compliance with state and federal air permitting requirements ensure compliance with State Implementation Plans. Further, states maintain air quality monitors to determine compliance with the NAAQS throughout the state. Table 2.8.1-2 of the EA provides the attainment status of each county in the project area and discloses ambient air quality concentrations in the project areas as part of the air dispersion modeling analysis in table 2.8.1-11. On the issue that the Clean Air Council raises on radius of influence for cumulative impacts, we assert that these ambient air quality concentrations are a cumulative representation as they include the ambient air environment of the region. Further, the EA correctly discloses federal requirements, but this was in conjunction with, not in lieu of, an independent analysis. Commission staff required Columbia to perform additional air quality quantitative modeling using the EPA-approved AERMOD in screening mode, which is beyond what is required by the state permitting process, in order to provide a comprehensive and conservative analysis. The EA analyzed the results and found that the project would not result in a violation of the NAAQS.

125. The Clean Air Council suggests that local climate change impacts could be extrapolated from resources such as those mentioned in the EA and reports released by the State of Pennsylvania. The Clean Air Council further comments that the Commission declines to attempt any meaningful analysis of the cumulative climate change impacts of the project with other similar or related projects. We clarify here that the emissions of greenhouse gases from the project would not have any direct impacts on the environment in the project area. We concur with the EA's conclusion that there is no standard methodology to determine how a project's incremental contribution to greenhouse gases would result in physical effects on the environment, either locally or globally. We also agree with the EA's conclusion that because we cannot determine the project's incremental physical impacts on climate change, it is not possible to determine whether or not the project's contribution to cumulative impacts on climate change will be significant.

126. The CCPC disagrees with the EA's finding that the project would not contribute to cumulative long-term impacts. The EA acknowledges cumulative impacts will occur and determines that the impacts of the proposed action when added to the impacts of other present and reasonably foreseeable future actions would not result in a significant cumulative impact on the environment, including long term impacts.

127. The Clean Air Council comments that the EA did not adequately address the cumulative impacts of forest fragmentation. We disagree. The EA states that the project area can be described as suburban and rural. Although wooded lands are crossed, the project pipelines do not cross large undisturbed, forested tracts. Thus, forests would not be fragmented and a cumulative impact would not occur as Columbia's proposed pipeline loops are generally aligned with existing pipelines that avoid undisturbed forest.

128. Based on the analysis in the EA, we conclude that if constructed and operated in accordance with Columbia's application and supplements, and in compliance with the environmental conditions in the appendix to this order, approval of Columbia's proposal would not constitute a major federal action significantly affecting the quality of the human environment.

129. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction of facilities approved by this Commission.<sup>82</sup>

130. At a hearing held on December 18, 2014, the Commission on its own motion received and made part of the record in this proceeding all evidence, including the application, as supplemented, and exhibits thereto, and all comments submitted herein, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity is issued authorizing Columbia to construct and operate the East Side Expansion Project, as described more fully in this order and in the application.

(B) Columbia is authorized to abandon certain facilities by removal, as described more fully in this order and in the application.

(C) The certificate issued in Ordering Paragraph (A) is conditioned on:

- (1) Columbia's completing the authorized construction of the proposed facilities and making them available for service within two years of the date of this order pursuant to section 157.20(b) of the Commission's regulations;
- (2) Columbia's compliance with all applicable Commission regulations, including paragraphs (a), (c), (e), and (f) of section 157.20 of the

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<sup>82</sup> See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

- Commission's regulations;
- (3) Columbia's compliance with the environmental conditions listed in the appendix to this order.

(D) Columbia's proposed initial reservation rates for incremental transportation services for the East Side Expansion Project are approved. Columbia must maintain its records for the expansion project in a manner to comply with the requirements of section 154.309 of the Commission's regulations.

(E) Columbia's proposal to charge its existing system wide ITS rate is approved. Columbia is granted a predetermination of rolled-in rate treatment for the commodity component of Rate Schedules FTS and NTS and for the EPCA, TCRA, OTRA, and RAM charges, absent a significant change in circumstances

(F) Columbia must file actual tariff records setting forth its incremental recourse rates in accordance with section 154.207 of the Commission's regulations not less than 30 days, or more than 60 days, prior to placing the East Side Expansion Project in service.

(G) Columbia shall execute firm natural gas transportation contracts equal to the levels and term of service represented in its precedent agreements prior to commencing construction.

(H) Columbia shall notify the Commission's environmental staff by telephone, e-mail, and/or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Columbia. Columbia shall file written confirmation of such notification with the Secretary of the Commission (Secretary) within 24 hours.

(I) Columbia shall notify the Commission within ten days of the date of abandonment of the subject facilities.

(J) The unopposed motions to intervene out of time filed before issuance of this order are granted.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

## Appendix Environmental Conditions

As recommended in the environmental assessment (EA), and modified in the Order, this authorization includes the following conditions:

1. Columbia shall follow the construction procedures and mitigation measures described in its application, supplements, as identified in the EA, and as modified by this Order. Columbia must:
  - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary;
  - b. justify each modification relative to site-specific conditions;
  - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
  - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) before using that modification.
2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources associated with abandonment, construction, and operation of the project. This authority shall allow:
  - a. the modification of conditions of this Order; and
  - b. the design and implementation of any additional measures deemed necessary (including stop-work authority) to ensure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from activities associated with the abandonment, construction, and operation of the project.
3. **Prior to any construction**, Columbia shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EI), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets, and shall include all of the staff's recommended facility locations identified in the EA. **As soon as they are available, and before the start of construction**, Columbia shall file with the Secretary any revised detailed survey alignment maps or sheets at a scale not smaller than 1:6,000 with station

positions for all facilities approved by this Order. All requests for modifications of environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Columbia's exercise of eminent domain authority granted under Natural Gas Act section 7(h) in any condemnation proceedings related to this Order must be consistent with these authorized facilities and locations. Columbia's right of eminent domain granted under Natural Gas Act section 7(h) does not authorize it to increase the size of its natural gas pipeline to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Columbia shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that will be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and documentation of landowner approval, whether any cultural resources or federally-listed threatened or endangered species will be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps, sheets, or aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area.**

This requirement does not apply to extra workspace allowed by the Columbia's *Erosion and Sediment Control Plan*, minor field realignments per landowner needs, and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
  - b. implementation of endangered, threatened, or special concern species mitigation measures;
  - c. recommendations by state regulatory authorities; and
  - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **At least 60 days before construction begins**, Columbia shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Columbia must file revisions to the plan as schedules change. The plan shall identify:

- a. how Columbia will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff environmental information requests), identified in the EA, and required by this Order;
  - b. how Columbia will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
  - c. the number of EIs assigned per spread, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
  - d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
  - e. the location and dates of the environmental compliance training and instructions Columbia will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change);
  - f. the company personnel (if known) and specific portion of Columbia's organization having responsibility for compliance;
  - g. the procedures (including use of contract penalties) Columbia will follow if noncompliance occurs; and
  - h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
    - (1) the completion of all required surveys and reports;
    - (2) the environmental compliance training of onsite personnel;
    - (3) the start of construction and/or abandonment; and
    - (4) the start and completion of restoration.
7. Columbia shall employ at least one EI per construction spread. The EI(s) shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
  - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
  - c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;
  - d. a full-time position, separate from all other activity inspectors;
  - e. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and



- f. responsible for maintaining status reports.
8. Beginning with the filing of its Implementation Plan, Columbia shall file updated status reports with the Secretary on a **weekly basis until all construction and restoration activities are complete**. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update on Columbia' efforts to obtain the necessary federal authorizations;
  - b. the construction status of the project, work planned for the following reporting period, and any scheduling changes for stream crossings or work in other environmentally sensitive areas;
  - c. a listing of all problems encountered and each instance of noncompliance observed by the EI during the reporting period (both for the conditions imposed by the Commission and any environmental conditions or permit requirements imposed by other federal, state, or local agencies);
  - d. a description of the corrective actions implemented in response to all instances of noncompliance, and their cost;
  - e. the effectiveness of all corrective actions implemented;
  - f. a description of any landowner/resident complaints that may relate to compliance with the requirements of this Order, and the measures taken to satisfy their concerns; and
  - g. copies of any correspondence received by Columbia from other federal, state or local permitting agencies concerning instances of noncompliance and Columbia's responses.
9. **Prior to receiving written authorization for the Director of OEP to commence construction of any project facilities**, Columbia shall file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
10. Columbia must receive written authorization from the Director of OEP **before placing the project into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the project are proceeding satisfactorily.
11. **Within 30 days of placing the authorized facilities in service**, Columbia shall file an affirmative statement with the Secretary, certified by a senior company official:
- a. that the facilities have been abandoned, constructed and installed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or

- b. identifying which of the Certificate conditions Columbia has complied with or will comply with. This statement shall also identify any areas affected by the project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
12. **Prior to construction of Line 1278 Loop**, Columbia shall file with the Secretary, for review and written approval by the Director of OEP, the geotechnical report for mileposts 7.8 to 8.1 and any resulting plan to account for potential ground subsidence at this location.
13. **Prior to construction**, Columbia shall file with the Secretary a revised *Erosion and Sediment Control Plan*, for review and written approval by the Director of OEP, that includes the following:
- a. a statement that burial of construction debris, including large rocks and stumps, within the construction work area is an unacceptable method of disposal;
  - b. a statement that final grading will be completed within 20 calendar days of backfilling (10 days in residential areas), weather and soil conditions permitting;
  - c. a definition of vegetation success in agricultural areas that is consistent with the Commission's 2013 *Upland Erosion Control, Revegetation, and Maintenance Plan* (revegetation shall be considered successful when upon visual survey, crop growth and vigor are similar to adjacent undisturbed portions of the same field, unless the easement agreement specifies otherwise); and
  - d. a statement that mowing and clearing of riparian areas is prohibited between April 15-August 1 of any year.
14. **Prior to construction of Line 1278 Loop**, Columbia shall file with the Secretary for review and written approval by the Director of OEP a site-specific plan(s) for the crossings of Beaver Creek.
15. **Prior to construction of Line 10345 Loop and Line 1278 Loop**, Columbia shall file with the Secretary a revised table identifying the location by milepost of all private wells within 150 feet of pipeline construction or blasting activities. Columbia shall conduct, with the well owner's permission, pre- and post-construction monitoring of well yield and water quality for these wells. **Within 30 days of placing the facilities in service**, Columbia shall file a report with the Secretary discussing whether any complaints were received concerning well yield or water quality and how each was resolved.

16. **Prior to construction of Loop 10345**, Columbia shall file with the Secretary the results of its coordination with New Jersey Natural Heritage Program regarding state protected species and any measures Columbia will implement to avoid and/or minimize effects to state protected species.
17. Columbia shall develop and implement environmental complaint resolution procedures that remain active for at least **two years** following completion of construction of the project. The procedures shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the project and restoration of the right-of-way. **Prior to construction**, Columbia shall mail the complaint procedures to each landowner whose property will be crossed by the project, and file a copy with the Secretary.
  - a. In its letter to affected landowners, Columbia shall:
    - (1) provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
    - (2) instruct the landowners that if they are not satisfied with the response, they should call Columbia's Hotline; and
    - (3) instruct the landowners that if they are still not satisfied with the response from Columbia's Hotline, they should contact the Commission's Dispute Resolution Division Helpline at 877-337-2237 or at [ferc.adr@ferc.gov](mailto:ferc.adr@ferc.gov).
  - b. In addition, Columbia shall include in its biweekly status report a copy of a table that contains the following information for each problem/concern:
    - (1) the identity of the caller and date of the call;
    - (2) the location by milepost and identification number from the authorized alignment sheet(s) of the affected property;
    - (3) a description of the problem/concern; and
    - (4) an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.
18. **Prior to construction**, Columbia shall file with the Secretary, for review and written approval by the Director of OEP, revised site-specific residential construction plans that state that safety fencing shall remain in place throughout all active phases of construction.
19. **Prior to construction**, Columbia shall file with the Secretary evidence of landowner concurrence with Columbia's proposed site-specific residential

construction plan for any residences located within 10 feet of the proposed construction workspace.

20. **Prior to commencing service of the modified Milford Compressor Station**, Columbia shall file with the Secretary a visual screening plan for review and written approval of the Director of OEP.
21. Columbia **shall not begin construction** of facilities and/or use of all staging, storage, or temporary work areas and new or to-be-improved access roads **until**:
  - a. Columbia files with the Secretary:
    - (1) Any remaining cultural resources survey reports, evaluations, and avoidance/treatment plan(s), and
    - (2) comments on the cultural resources reports and plans from the New Jersey and Pennsylvania State Historic Preservation Offices;
  - b. the Advisory Council on Historic Preservation is afforded an opportunity to comment if historic properties would be adversely affected; and
  - c. the Commission staff reviews and the Director of OEP approves the cultural resources reports and plans, and notifies Columbia in writing that treatment plans/mitigation measures (including archaeological data recovery) may be implemented and/or construction may proceed.

All materials filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: “**CONTAINS PRIVILEGED INFORMATION - DO NOT RELEASE.**”

22. **Prior to construction**, Columbia shall file with the Secretary for review and written approval by the Director of OEP a Fugitive Dust Control Plan that specifies the precautions that Columbia will take to minimize fugitive dust emissions from construction activities including additional mitigation measures to control fugitive dust emissions of Total Suspended Particulates and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns. The plan shall clearly explain how Columbia will implement measures, such as:
  - a. watering the construction workspace and access roads;
  - b. providing measures to limit track-out onto the roads;
  - c. identifying the speed limit that Columbia will enforce on unsurfaced roads;
  - d. covering open-bodied haul trucks, as appropriate;
  - e. clarifying that the EI has the authority to determine if/when water or a palliative needs to be used for dust control; and
  - f. clarifying the individuals with the authority to stop work if the contractor does not comply with dust control measures.

23. **Prior to construction**, Columbia shall file with the Secretary, for the review and written approval by the Director of OEP, site-specific plans detailing the additional noise mitigation measures Columbia will use to make all reasonable efforts such that the noise levels attributable to HDD activities do not exceed an increase of 10 decibels above the existing noise levels at the Noise Sensitive Areas (NSAs) near the HDD #2 entry and exit, HDD #4 entry, HDD #7 entry and exit, HDD #8 entry and exit, and HDD #10 exit sites.
24. Columbia shall make all reasonable efforts to ensure its predicted noise levels from the modified Milford and Easton Compressor Stations are not exceeded at the nearby NSAs and file noise surveys showing this with the **Secretary no later than 60 days after placing the Milford and Easton Compressor Station in service**. If the noise attributable to the operation of the Milford and Easton Compressor Stations at full load exceeds a day-night sound level ( $L_{dn}$ ) of 55 decibels on the A-weighted scale (dBA) at any nearby NSAs, Columbia shall file a report identifying what modifications it intends to make in order to meet that level **within 1 year of the in-service date**. Columbia shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days after it installs any additional noise controls**.
25. **Prior to any abandonment activities at the Milford and Easton Compressor Stations**, Columbia shall file the following information with the Secretary, for review and written approval by the Director of OEP:
  - a. identify any facilities to be abandoned or disturbed, including tie-in locations, that may be contaminated with PCBs;
  - b. verify that the appropriate PCB testing will be conducted on these facilities, and discuss how any abandoned PCB contaminated facilities will be properly disposed of; and
  - c. identify measures to be implemented to provide adequate worker safety for handling PCB contaminated materials.
26. **Prior to any abandonment or construction activities**, Columbia shall file the following information with the Secretary for review and written approval by the Director of OEP:
  - a. identify any known facilities to be abandoned or disturbed having ACMs;
  - b. develop protocols to comply with the appropriate requirements to identify ACMs that might be encountered;
  - c. if facilities with ACMs will be abandoned or disturbed, identify methods to separate the ACMs for proper disposal; and
  - d. develop worker protection protocols, and provide for proper disposal of ACMs.

27. **Prior to construction of Line 1278 Loop**, Columbia shall file with the Secretary, for the review and written approval by the Director of OEP, a site-specific plan detailing any additional measures Columbia will use to address the concerns of the Downingtown Area School District regarding impacts of the project on school property and activities, access to buildings, driveways, parking lots, sports fields and other facilities, and any additional measures implemented to ensure safe construction around schools. Columbia shall develop the plan in consultation with the school district and include consultation with the school district regarding the plan.